SOUTH TEXAS NUMBER

50c

The OIL WEEKLY

OIL and GAS ENGINEERING

FOR OIL AND GAS PRODUCERS AND PIPE LINE MEN

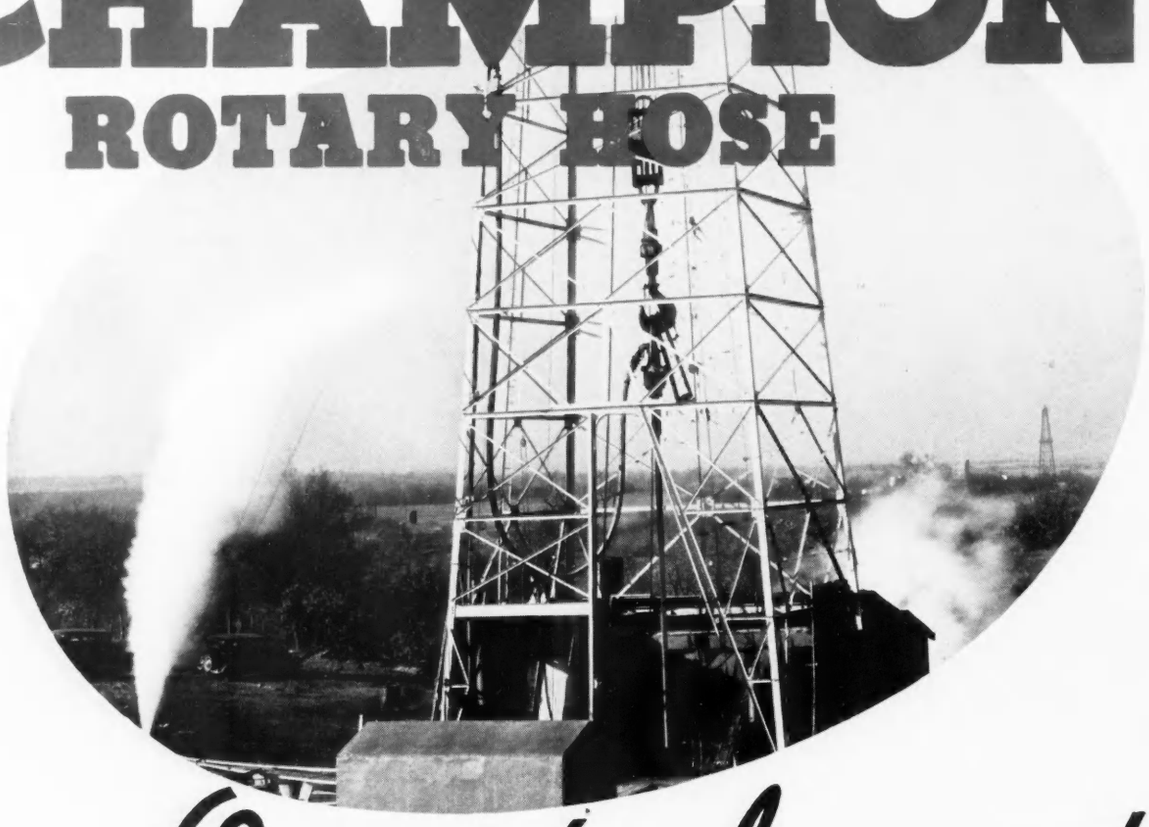
THE WEEK'S NEWS INTERPRETED

Whatever your formation—
there's a Hughes TRI-CONE Rock Bit
especially designed to meet
your drilling problem

UGHES TOOL COMPANY - HOUSTON, TEXAS, U. S. A.

VOLUME 83 SEPTEMBER 28 1936 NUMBER 3

CHAMPION
ROTARY HOSE



Once used···always used

★ Try a length of Champion Rotary Hose on your next drilling job. If you use it once, we know you'll continue to use it.

Champion has the ruggedness to withstand the abuses encountered in deep well drilling. The body is amply reenforced with two plies of high tensile, steel wire wound in opposite directions, enabling it to endure the heaviest shocks and pressures. Its oil-resisting tube is made extra thick to guarantee long life under the abrasive action of mud and grit. The strong, tough cover is made to resist cutting and abrasion.

Champion Hose is giving excellent service in all rotary fields and has stood every test of punishment. If you want maximum feet drilled per dollar spent for hose—use Champion. Our distributors keep ample stocks on hand for quick deliveries.

MID-CONTINENT DISTRIBUTORS
Frick-Reid Supply Corporation, Tulsa, Okla.
The Bovaird Supply Company, Tulsa. Okla.

PACIFIC COAST DISTRIBUTORS
W. C. Hendrie & Company, Inc., Los Angeles, Calif.
Pacific Coast Rubber Co., San Francisco, Calif.

THE REPUBLIC RUBBER CO.
YOUNGSTOWN, OHIO

Manufacturers of Rotary and all other types of Hose, Transmission Belting, Packing, Gaskets, Rings. etc., for Oil Country Service

The OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 3301 Buffalo Drive, Houston, Texas. Subscription price $2.00 per year; 15 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

Why Not PAY FOR?

GET WHAT YOU

WHETHER YOU REALIZE it or not, you pay for good equipment such as Cement Float Shoes, Collars and Guide Shoes, even when you don't get it. ● You pay for it first in the extra time it often takes to make-up a shoe on the casing string if the threads are not accurately machined. ● You pay for it while floating-in or at the completion of the cementing operation, if the back-pressure valve fails to hold. ● You pay in time, money, and in reputation when an accident occurs in running casing, and the valve does not hold. ● You pay for it dearly when you spend extra time and incur extra bit expense in drilling out metal, instead of concrete and Bakelite. ● You pay for it when metal, or other dangerous fragments prevent coring directly below the shoe. ● You pay for it when metal or other fragments (left in the hole from drilling out a shoe or collar) deflect the bit and start an off-vertical hole, or where sidetracked fragments later cause mechanical troubles. ● In fact, you pay for Baker Cement Equipment for every Guiding, Floating and Cementing need. Get your money's worth and enjoy the successful results which Baker offers you.

BAKER CEMENT EQUIPMENT

for guiding—floating—cementing casing

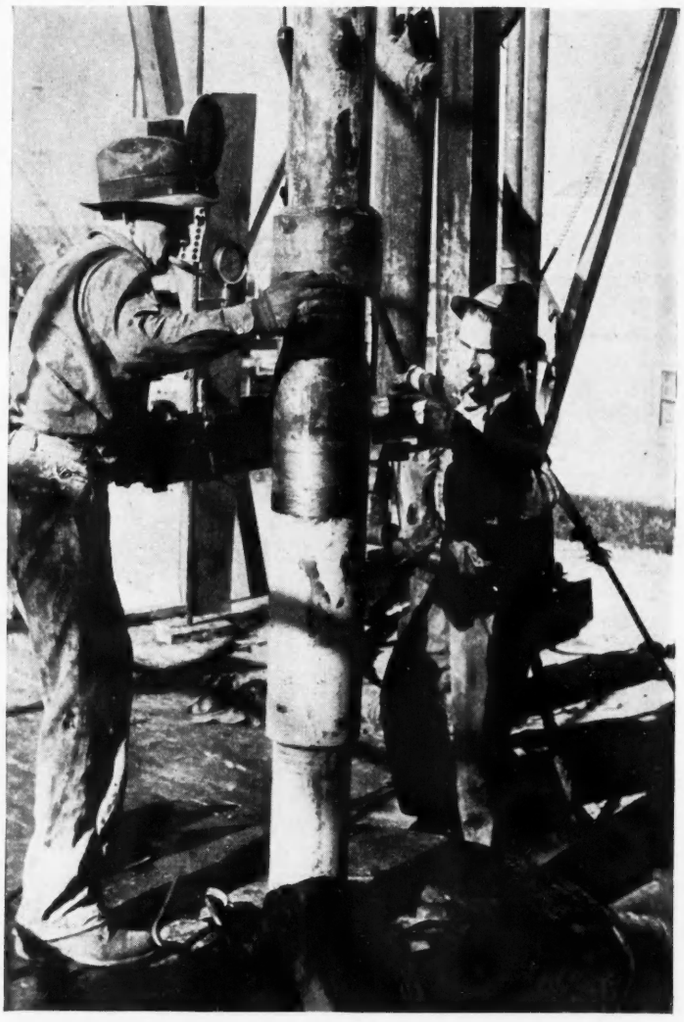
BAKER OIL TOOLS, INC.

POST OFFICE BOX 609 HUNTINGTON PARK CALIFORNIA

COALINGA • TAFT • HOUSTON • OKLAHOMA CITY • TULSA • NEW YORK

Give Your Up-Set Drill Pipe 100% Protection

Patterson - Ballagh Protectors are especially necessary on external up-set drill pipe because of the extra large diameter of tool joints. These can only be protected properly by Patterson-Ballagh Protectors.



Installing 6" Patterson-Ballagh Protectors on external upset drill pipe—Oklahoma City field.

Eliminate Scoring of Pipe and Casing

Patterson-Ballagh Protectors offer a tough, resilient barrier which prevents contact of pipe with casing.

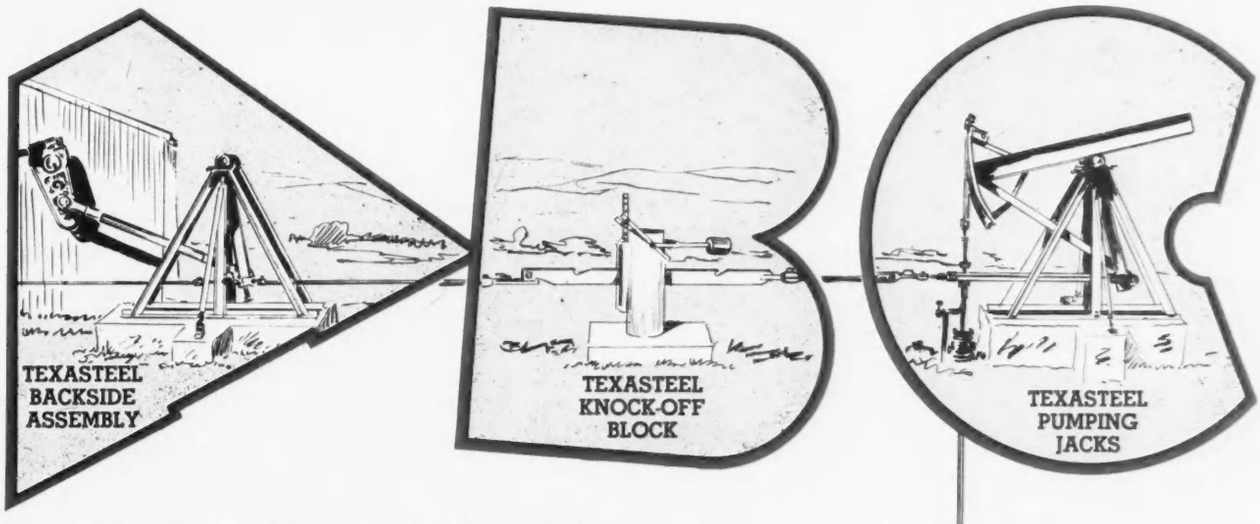
We manufacture Protectors to fit all external and flush joint drill pipe. Special expander tools are furnished for easy application.

PATTERSON-BALLAGH ALL-RUBBER PROTECTORS

PATTERSON-BALLAGH CORPORATION

Plant and General Offices: **1900 East 65th St., Los Angeles, Calif., U.S.A.**

Oklahoma Office: **Oklahoma City, 1704 N. W. 17th St.**
Texas Office: **Houston, 515 M & M Building**
New York Office: **39 Cortlandt St., New York City**
Louisiana Office: **Box 23, Oil City, La.**

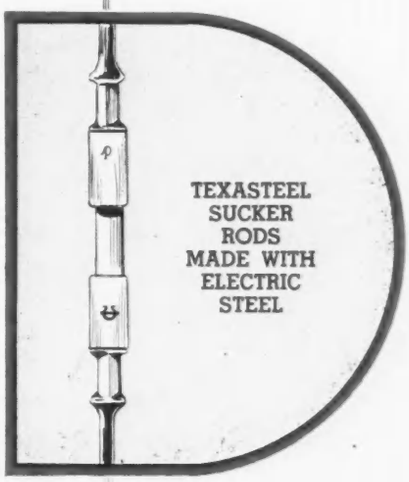


ECONOMICAL PRODUCTION

SIMPLE AS A-B-C's with TEXASTEEL Pumping Equipment

Simple as A-B-C's . . . because this improved equipment has every new feature that can insure trouble-free operation. Most parts are standard and interchangeable. Frames are arc-welded. Bearings are the exclusive Texasteel dust-proof stuffing box packing gland type . . . increasing efficiency of operation and prolonging the life of equipment because they are practically trouble-free.

The Texasteel line is complete — with a size for any job and any field condition — from "power to oil" use Texasteel equipment. It's simple, also, to order from Texasteel. Their trucks deliver over-night to most points in Texas, Oklahoma, Louisiana and New Mexico. You are assured of prompt, dependable service.



TEXASTEEL

COMPLETE OIL FIELD PUMPING EQUIPMENT . . . PUMP JACKS - SWINGS - HOLD-DOWNS - HOLD-UPS - MULTIPLIERS - PULL RODS - POLISH RODS - SUCKER RODS - SAFETY KNOCK-OFF BLOCKS - BACK SIDE ASSEMBLIES.

★ TEXAS STEEL CO. ★

Plant and General Offices: **FORT WORTH, TEXAS. L. D. 76**

A Recognized Supply House in Your Field Can Supply You

HOUSTON ★ WAREHOUSE STOCKS ★ KILGORE

HOW TO HANDLE IT IF IT IS DEEP WELL DRILLING

USE DEEPWELL THE WORLD AROUND

● Rex Deepwell Chabelco is driving rotaries the world around. In the toughest drilling of the California rocks, in the deep wells of the Gulf Coast, in Venezuela, Colombia, Iraq, Burma, Roumania, in all types of drilling, easy or hard, Rex Deepwell is driving wells at lower cost per foot of hole.

Rex Deepwell takes up the shock loads and the high speeds of modern drilling with 9, 10, even 13 lines on the block. It meets the strenuous modern tests for strength, lasting qualities and economy.

Fine finish, high strength, and the new Rex method of lubricating the pins make Rex Deepwell the lowest-cost chain per foot of hole for high-speed drilling.

Insist on Deepwell for both easy and hard drilling.

Rex Deepwell DW-3—DW-4.

CHAIN BELT COMPANY
1639 West Bruce St., Milwaukee, Wis.

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Lucey Products Corporation — Murray-Brooks Hardware Company, Ltd.
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CHAIN BELT COMPANY OF MILWAUKEE

Deepwell Chabelco

SERVING SOUTH TEXAS

This announces the opening of our Corpus Christi Branch and the facilities we have placed in South Texas for the convenience of our customers in this territory. This further expansion enables us to extend full cooperation to Supply Companies in this area in the sale and servicing of Waukesha Engines and Portable Rigs.

J. P. Morrow is district manager, and Clarence Littlepage is in charge of the service department. Service men working out of this branch cover the entire South Texas area.

WAUKESHA ENGINES

We stock Waukesha Engines up to and including 325 H.P., and parts, and maintain a repair department for servicing Waukesha Engines, including equipment for Piston Grinding, Cylinder Grinding, Line Reaming, and Valve Inserting.

PORTABLE RIGS

We maintain at this branch a complete service department for the convenience of Portable Rig Customers. A complete line of available rig parts is carried in stock, and the shop is equipped to handle rig repairs.

PORTABLE POWER ECONOMY **RIG CO. INC.**

HOUSTON, TEXAS

Branches: **Dallas, Longview, Big Spring and Corpus Christi**

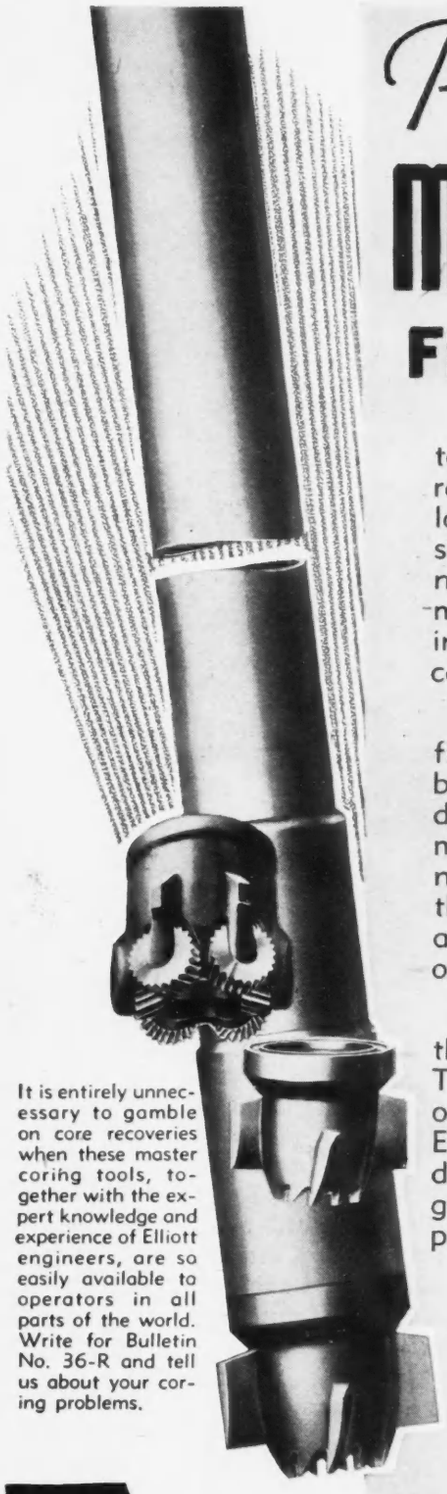
Export: **30 Rockefeller Plaza, New York City.**

KNOWLEDGE

Fig. 1742 Gaso Duplex Piston
Timken Bearing Power Pump

Knowledge is of different types. Some types are acquired at school, others through practical experience . . . The knowledge which is part of every Gaso Pump is of the latter type . . . Gaso men know oil-industry requirements through practical first-hand contact with oil-industry conditions . . . That's why they are able, year in and year out, to incorporate into Gaso Pumps the EXTRA measure of service which means an EXTRA return on the investment . . . Gaso Pump & Burner Mfg. Co., Tulsa, Oklahoma . . . Export Office: 149 Broadway, New York.

GASO PUMPS
for every oil industry need



It is entirely unnecessary to gamble on core recoveries when these master coring tools, together with the expert knowledge and experience of Elliott engineers, are so easily available to operators in all parts of the world. Write for Bulletin No. 36-R and tell us about your coring problems.

Practically MADE *to* ORDER FOR OIL COMPANIES

Were it possible for any oil company—in order to produce the very best core drill for its own specific requirements—to select the best from all the cumulative knowledge and experience of hundreds of similar companies, superintendents, oil field engineers, coring experts, drillers, metallurgists and field men—extending over the entire period of core drilling practice—the final result would be a tool identical with the Elliott Combination Rotary Core Drill.

Conducting a core drilling service for more than fifteen years on a price, service and performance basis and in competition with every type of coring device, Elliott has been compelled to develop and maintain coring equipment precisely suited to the needs of the companies it has served—a core drill that insures maximum footage of hole and dependable recoveries of good cores, at minimum cost of operation as well as maintenance.

Elliott Core drills are virtually made to order for the specific requirements of operating oil companies. They had to be in order to maintain their leadership over this long period of time. The current Model A Elliott Combination Rotary Core Drill is the ultimate development of all the knowledge and experience gained since Elliott blazed the trail in oil well coring practice more than a decade ago.

ELLIOTT CORE DRILLING COMPANY
4731 E. 52nd Drive, Los Angeles, California, U.S.A.
Export Office: 420 Lexington Ave., New York City

ELLIOTT *Combination* ROTARY CORE DRILLS

A TWO-FISTED GEAR UNIT for Oil Pumping Service

WHETHER you need a slow speed drive for the steady pumping of light producers, or equipment with sufficient power and strength to lift large volumes of oil from heavy producers . . . you'll find Westinghouse gear units most efficient and economical.

Westinghouse OP gear units are two-fisted gear drives that operate equally well in either right or left hand applications. The brake mounting can readily be changed in the field . . . no skilled mechanics or special tools are needed.

Double-extended high speed and low speed shafts . . . smooth single helical gears, BPT heat-treated gears, pinions and shafts . . . tapered roller bearings . . . an oil settling chamber to keep foreign matter out of the lubricant . . . housings reinforced at points of stress and with especially wide bases . . . these are a few of the features to be found in Westinghouse gear units.

Let us show you why Westinghouse gear units are best suited to your pumping requirements. Get in touch with our representative today or write Westinghouse, Room 5-N, East Pittsburgh, Pa.

J 07016

DISTRIBUTED BY OIL WELL SUPPLY COMPANY

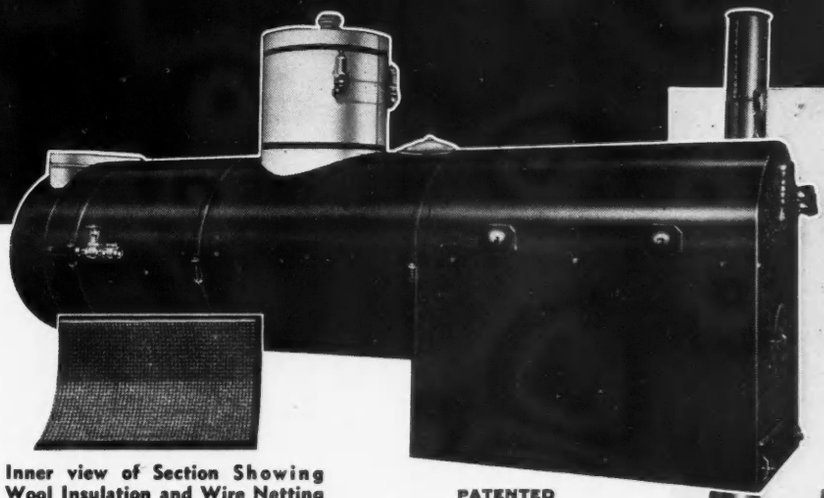
SUBSIDIARY OF UNITED STATES STEEL CORPORATION

Westinghouse

WESTINGHOUSE 1886 W 1936 GOLDEN JUBILEE

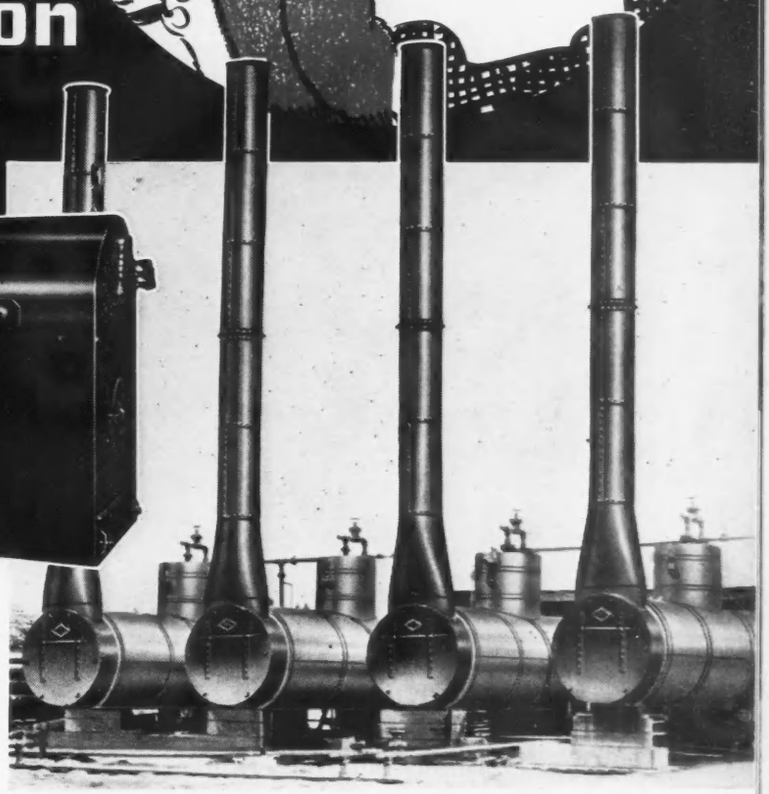
Get Your Boilers Ready for WINTER

MORE HEAT at Lower Cost when you install LUCEY Steel Jacketed Boiler Insulation



Inner view of Section Showing Wool Insulation and Wire Netting

PATENTED



Battery of Boilers with Lucey Steel Jacketed Insulation

Actual Tests have proven the advantages of the Lucey-Insulated Boilers over Uninsulated Boilers to be as numerous as they are important, including:

- Ten percent Greater Boiler Efficiency.
- Saving in Fuel—10% and Up.
- One-Third Less Pressure Drop—Steadier Steaming.
- Pays for Itself in One Year Through Savings.
- Returns 580% on Investment in 3 years.
- Effect of Weather Conditions Negligible.
- Low Maintenance—Reduces Scale.
- Removable—Waterproof.

The Lucey Insulation Casing consists of $\frac{1}{16}$" thick steel shell, lined with 2" thick blanket of Eagle-Picher Mineral Wool Insulation, with $\frac{3}{4}$" air space next to boiler. The 16 sections are easily installed after boiler is set up. Held in place by adjustable steel bands; easily removable for boiler inspection or repairs.

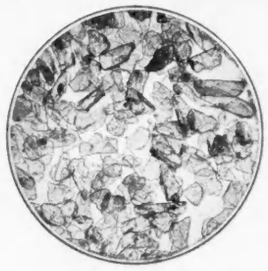
Write for Bulletin No. 110-2.

LUCEY

LUCEY BOILER and MANUFACTURING CORPORATION

Chattanooga, Tenn.

Tough..adhesive..dielectric . . . resistant to soil stresses



Reproduction of the micrograph above shows the interlocking of the flakes of the internal reinforcement used by Barrett. By laminating with the waterproofing agent they give Barrett Pipe Line Enamels unusual toughness and resistance to soil stresses.

For pipe of large diameter, The Barrett Company will furnish equipment required to revolve pipe and spread enamel.

Barrett PIPE LINE ENAMELS

BARRETT Pipe Line Enamels are the result of 82 years of unmatched experience in waterproofing underground and underwater structures. They are produced from specially refined coal-tar pitch—the most stable waterproofing agent known—with a unique, non-porous dielectric flake type filler. Experience has shown that they are tough, adhesive, water-resistant, dielectric, and impervious to oxidation or deterioration under ground or under water . . . provide lastingly effective protection against corrosion.

THE BARRETT COMPANY

40 RECTOR STREET NEW YORK, N. Y.

FIELD SERVICE

Carefully trained Barrett field men will gladly work with you, combining their special knowledge and experience with your familiarity with conditions along the right of way.

NORVELL-WILDER

Supply Company's NEW WAREHOUSE at

CORPUS CHRISTI

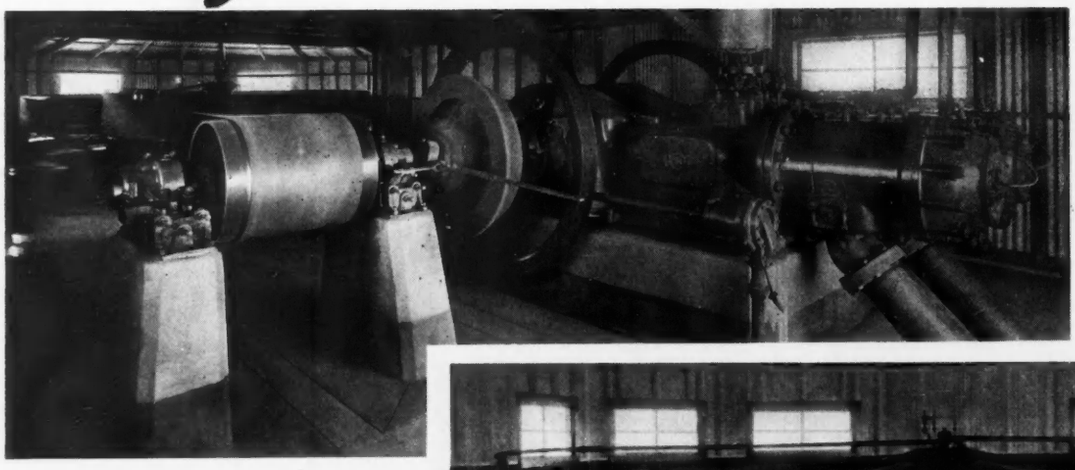
This large, new Norvell-Wilder warehouse will serve Southwest Texas where 3,000 wells were drilled last year, and where the number of wells estimated to be drilled this year, far exceed this number.

For appreciative, friendly service . . .
DAY or NIGHT . . . . always call the
NORVELL-WILDER MAN
- - - first

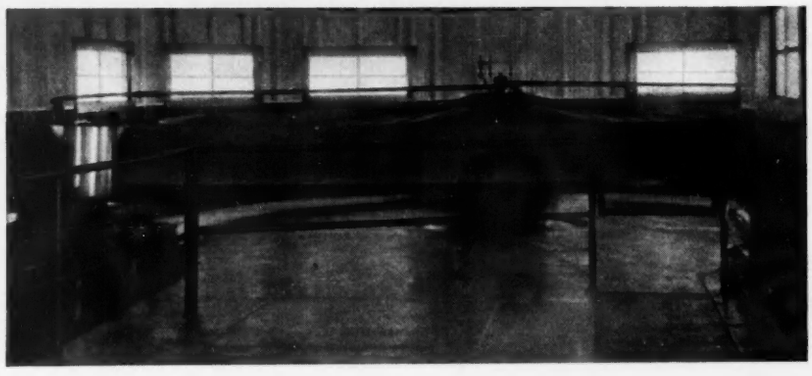
Norvell-Wilder
Supply Company

SERVING THE LARGEST OIL COMPANIES FOR A QUARTER OF A CENTURY

PARTNERS *in power . . . .*



REID Twin Gas Engine with 2-Bearing Cut-Off Rig; REID P. W. Bandwheel Power: 24-foot diameter and 20' face.



ENGINES and Reid BAND WHEEL POWERS

Well Known in SOUTH TEXAS!

In South Texas, the well known Partners in Power—the Reid Twin Gas or Oil Engine, with the always reliable, heavy duty Cut-Off Clutch Rig, and Reid Bandwheel Pumping Power—have proven that the logical method of lifting oil is with multiple well pumping by centrally located powers.

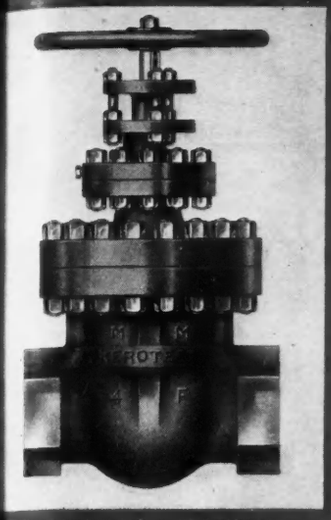
This partnership of 100% Reid Machinery is formed particularly for this work. It provides the operator with the mechanical efficiency, ruggedness, and dependability necessary for long, non-troublesome and economical operation. Results obtained by use of a complete REID Pumping Power Plant show that Lifting Costs are kept at a minimum, and Low Lifting Costs mean Greater Profits.

These Reid Plants are numerous, not only in South Texas but in many sections of the oil country. Reid representatives and distributors will welcome an opportunity of showing you such plants in operation, describing them in detail, and will furnish prices on the machinery and on complete turnkey installations.

Distributors:
Frick-Reid Supply Corporation
Tulsa and Pittsburgh
R. B. Moore
Bolivar, N. Y.

JOSEPH REID GAS ENGINE COMPANY

OIL CITY, PENNSYLVANIA

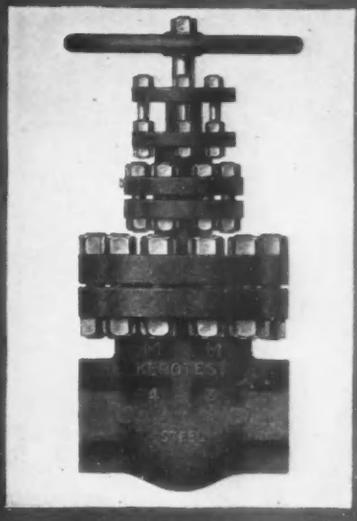


Kerotest Type "T" 6000 lb. test "Heavy Service" flow line valves are built with exceptionally heavy walls and are of extreme dimensions throughout to withstand the most severe field service due to shock, sand cutting and those many unusual conditions that continuously arise on wildcat operations, unproven territories, loose sand and unexpected pressure formations.

And here's the complete line of

KEROTEST

FLOW LINE VALVES



Kerotest Type "Z" 6000 lb. test "Standard" service Flow Line Valves are designed with large factors of safety and with attractive overall dimensions afford for very compact hookups. Type "Z" Flow Line Valves are also available in 8000 lb. test when required.

Kerotest Type "T" 3000 lb. test Flow Line Valves are the most popular type for all general field service. Many of the major operators have standardized on this type of flow line valve for all conditions requiring 1500 lb. working pressure or less, enabling them to standardize their field stocks also, enabling them to know that a low pressure valve will not get into their high pressure lines accidentally. Also supplied in 4000 lb. test when required.

Available for every Pressure and Service Condition

Here are six members of the famous Kerotest clan of valves who like their renowned brethern—the Kerotest Drilling Valve family—meet every flow line requirement encountered throughout the oil and gas world.

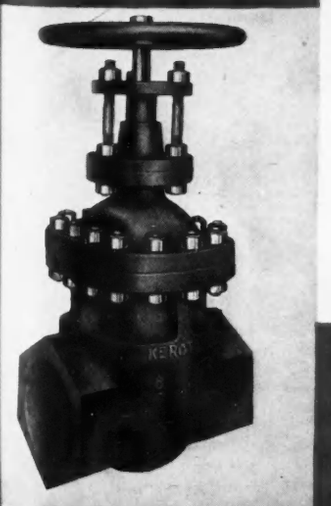
For all test pressures in excess of 2000 lbs., the toughest steel known to metallurgical science is regularly used . . . genuine heat treated manganese molybdenum cast steel, developed through many years of critical research and combining maximum tensile strength, high yield point with a very high ductility.

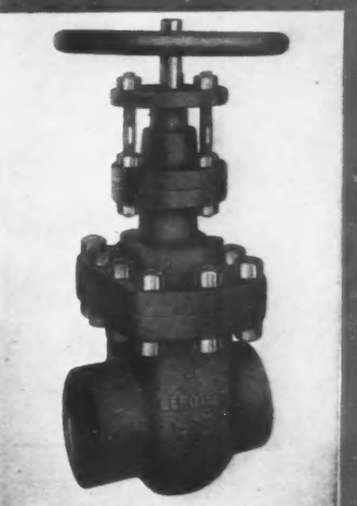
Flow line valves of 2000 lbs. or less test pressure are cast of heat treated Ilmenite carbon steel, offering extraordinary high factors of safety for their rated capacity.

All Kerotest Flow Line Valves are regularly furnished with either screwed or flanged ends in all standard sizes. The screwed end types are fitted with extra long, accurately cut threads to fit either line pipe or casing sizes as you may specify.

Check over the individual qualifications of each valve . . . see how ideally they meet any flow line problem you may contemplate.

Kerotest Type "E" 3000 lb. test Flow Line Valves are made of heat treated Ilmenite Steel Castings with screwed bonnet, ends and inside seats and fitted with Kerotest's alloy steel balling. Supplied screwed for screwed ends A.P.I. line pipe threading or regular, considered our standard, but casing threads can be furnished on special order.





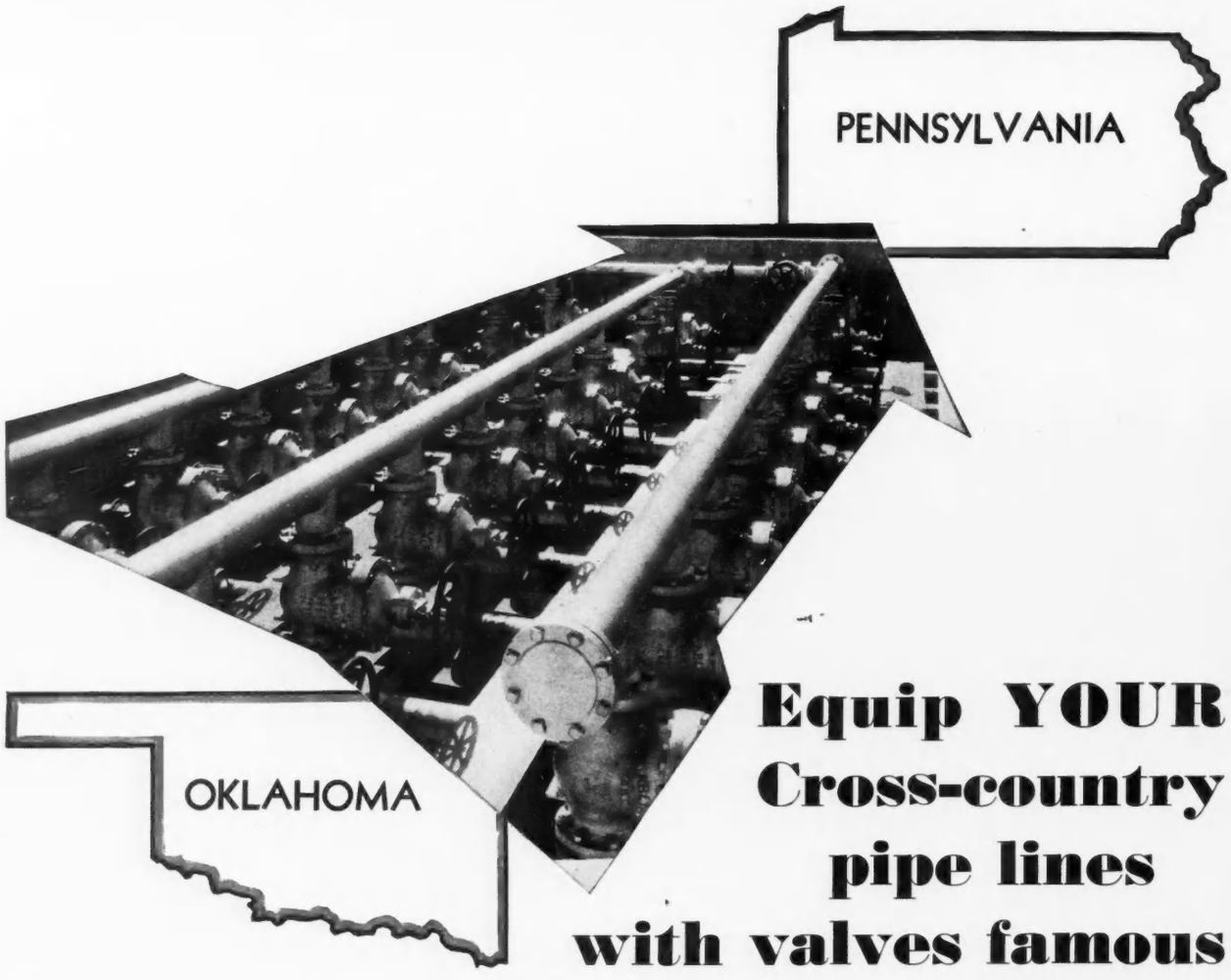
KEROTEST

KEROTEST MANUFACTURING CO.

PITTSBURGH, PENNSYLVANIA

Kerotest Type "S" 1500 lb. Test Flow Line Valves are made of heat-treated Ilmenite Steel Castings with rectangular bonnet and bolted body seat fitting.

Kerotest Type "V" 3000 lb. Test Flow Line Valves are of standard conventional steel valves of heat treated Ilmenite Steel Castings specially designed for all general flow line service for medium and



Equip YOUR Cross-country pipe lines with valves famous for *Longer service, Ease of operation and Quick repairs in the field*

A *pipe line* controlled by Darling Gate Valves—is the *shortest distance* between *producing wells* and *refinery profits!* Thousands of miles of such pipe lines—through arid desert heat, in many countries, and in *your own community*—prove this in *dependability—and dollars!*

Darling Valves are sturdily built on sound mechanical principles. They assure you of the efficient operation—the economical maintenance—afforded by improved design, quality materials, and exacting standards of workmanship. Specify Darling—*and save!*

DARLING VALVE & MFG. CO.

Williamsport, Pa.

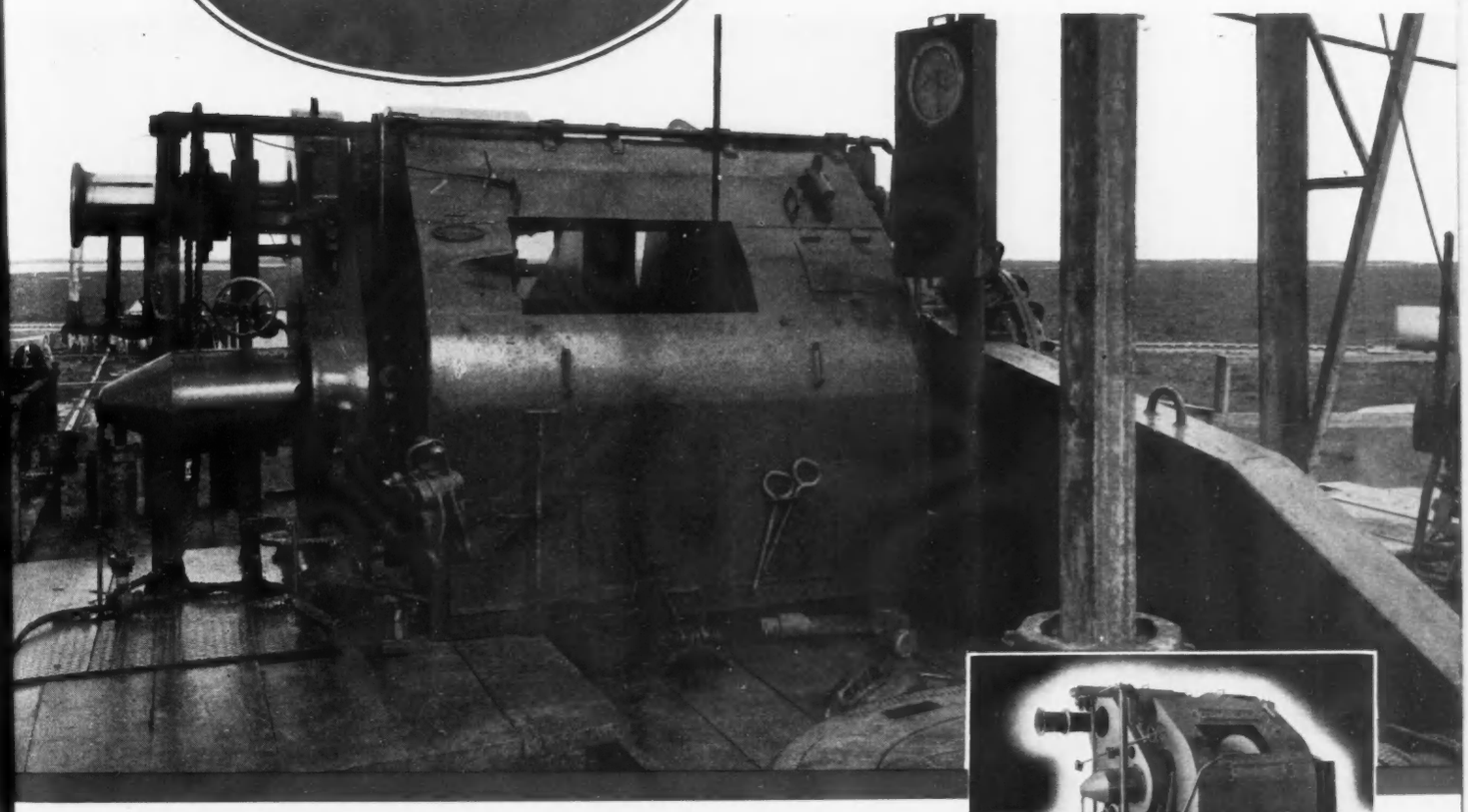
NEW YORK — OKLAHOMA CITY — HOUSTON

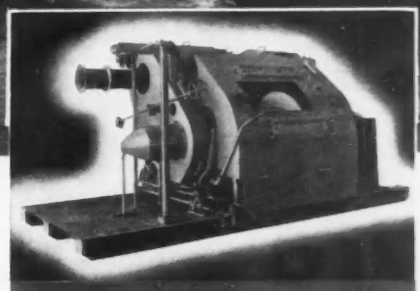
Mid-Continent Distributors:
International Supply Company
Moorlane Company

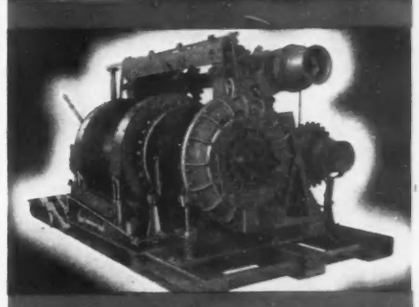
California Distributors:
Hickey Pipe & Supply Company
3375 East Slauson Avenue
Los Angeles, Calif.

DARLING GATE VALVES

Oil Men Like the New DREADNAUGHT







The new DREADNAUGHT DRAWWORKS is what the Oil Man ordered—a product of 34 years experience in building drawworks for drilling rigs.

Even engineers, unimpressed by reputation and experience alone, pronounce the DREADNAUGHT No. 11 an important contribution to the economy and efficiency of modern rotary drilling.

Field performance more than justifies the enthusiastic reception accorded the new DREADNAUGHT.

Ask about it at your Frick-Reid Store!

FRICK-REID
SUPPLY CORPORATION

PITTSBURGH, PA. **TULSA, OKLA.**

EXCLUSIVELY EQUIPMENT SUPPLIERS
BRANCH STORES IN OLD AND NEW FIELDS

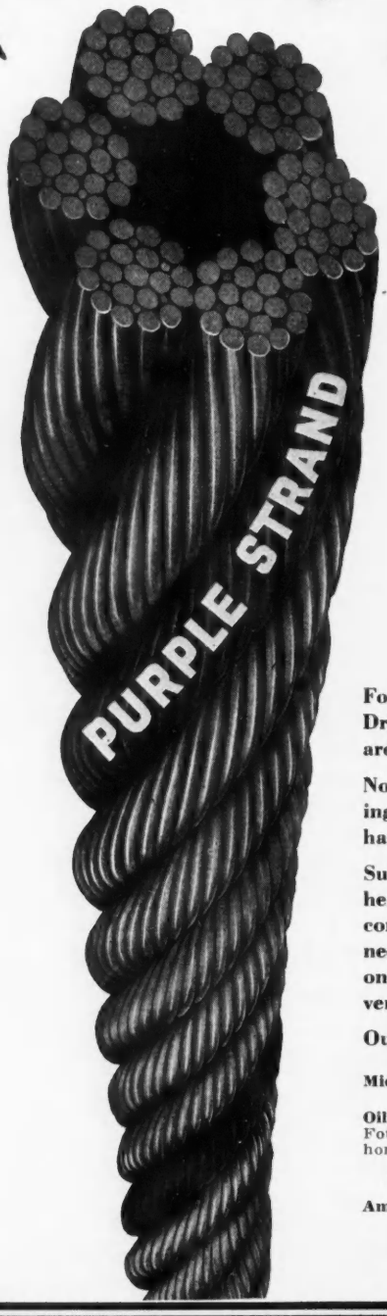
WILLIAMSPORT

SAFETY

STRENGTH

urges you to use

"Form Set"



WIRE LINES

for

ROTARY DRILLING

For many years Williamsport Cable Tool Drilling Lines have been the accepted standard.

Now we ask you to accept this Rotary Drilling Line with the same confidence that has been given to Cable Tool Lines.

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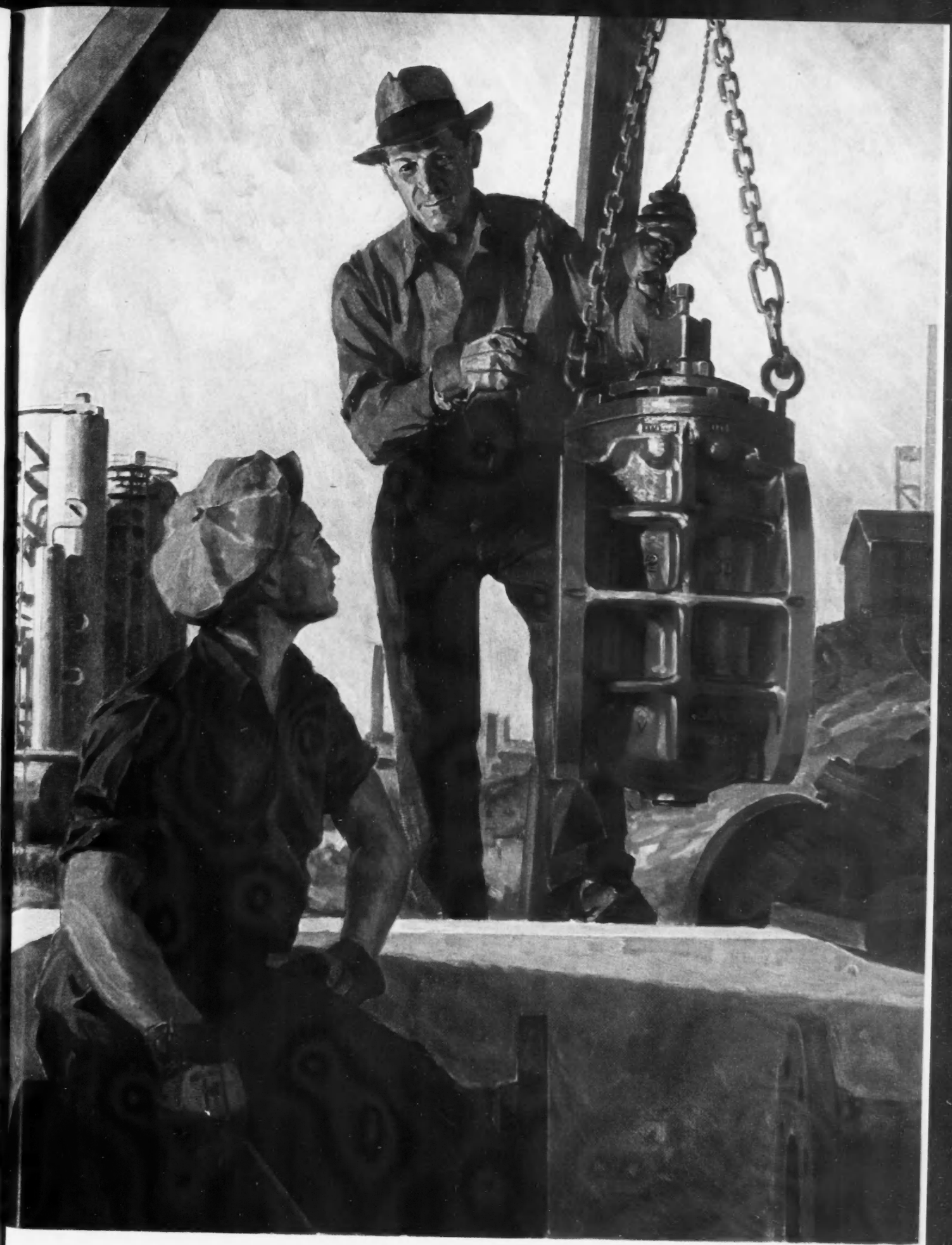

"Gosh! I wish they'd buy more of these Emco-Nordstroms"

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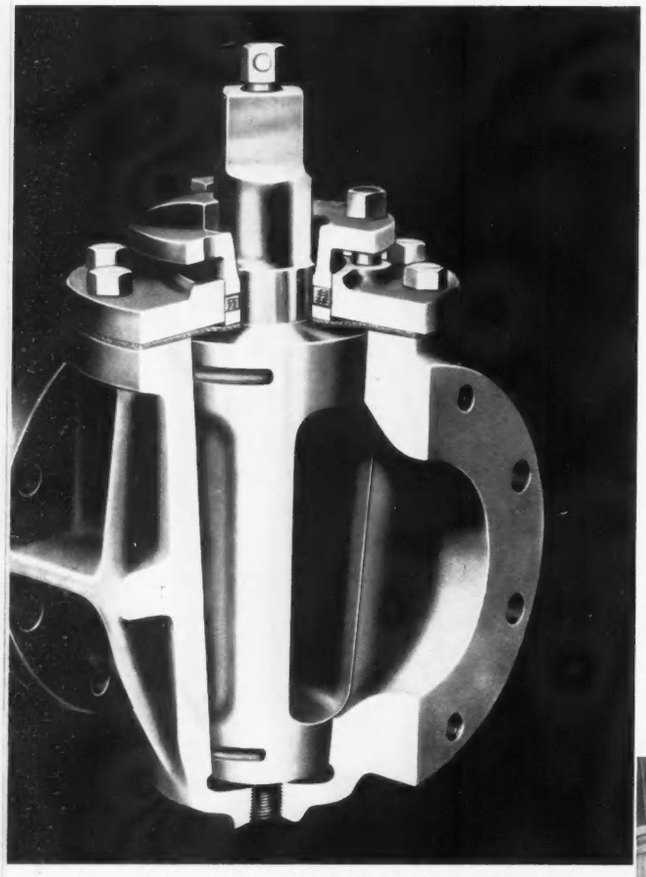

Above cut shows cut-away view of Emco-Nordstrom. Photo to right shows manifold in a Texas gasoline plant equipped with 8" and 10" Nordstroms on suction lines and 4" and 6" Nordstroms on discharge lines.

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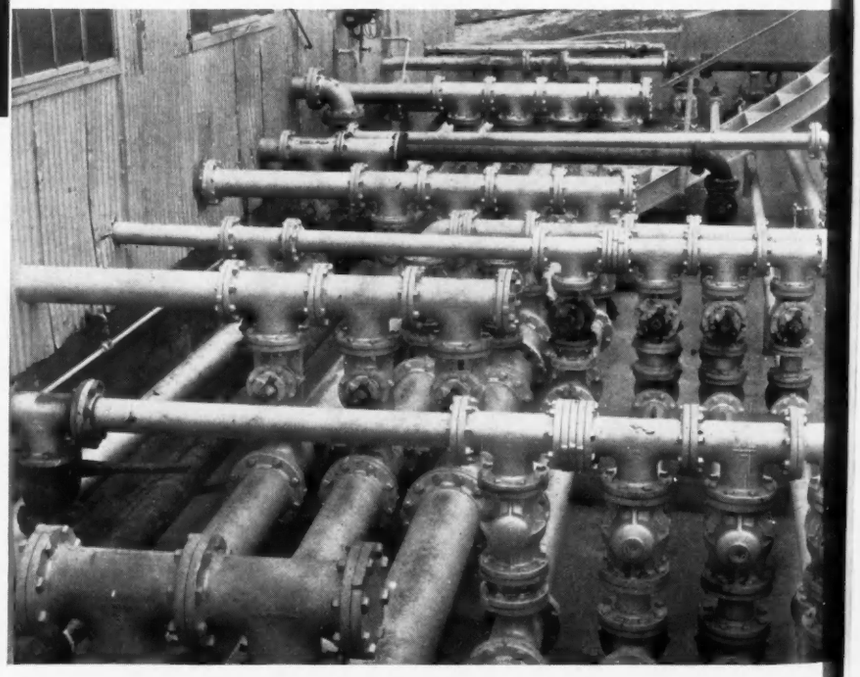

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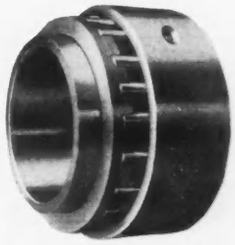

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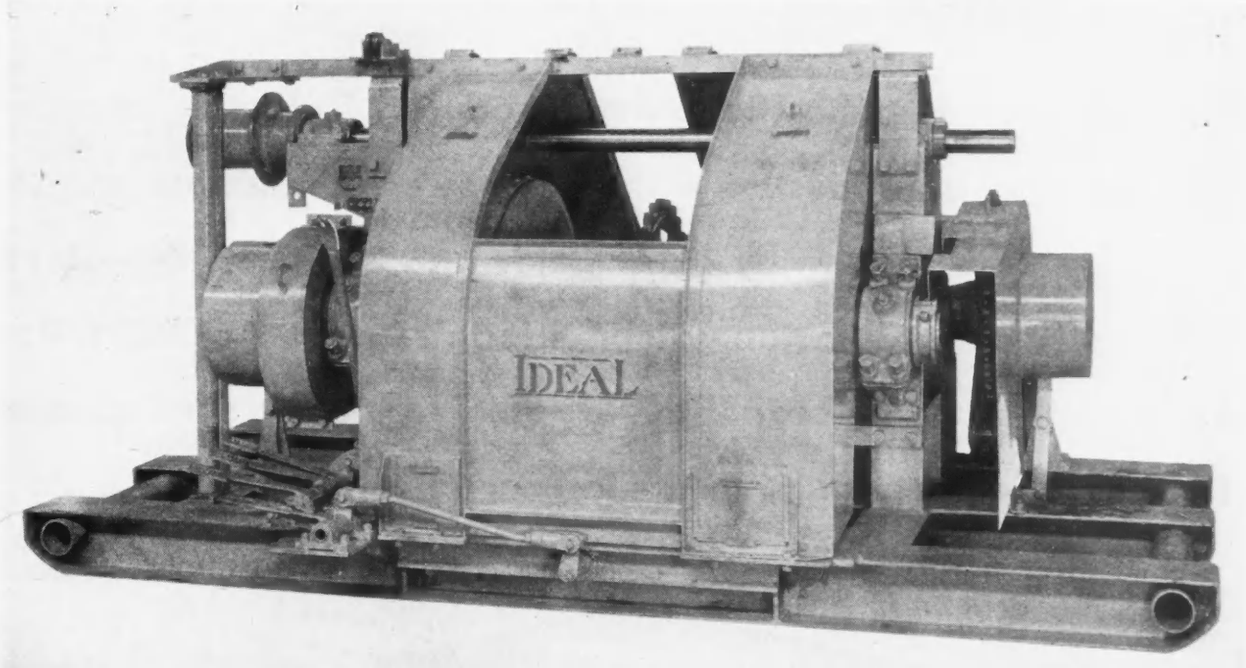

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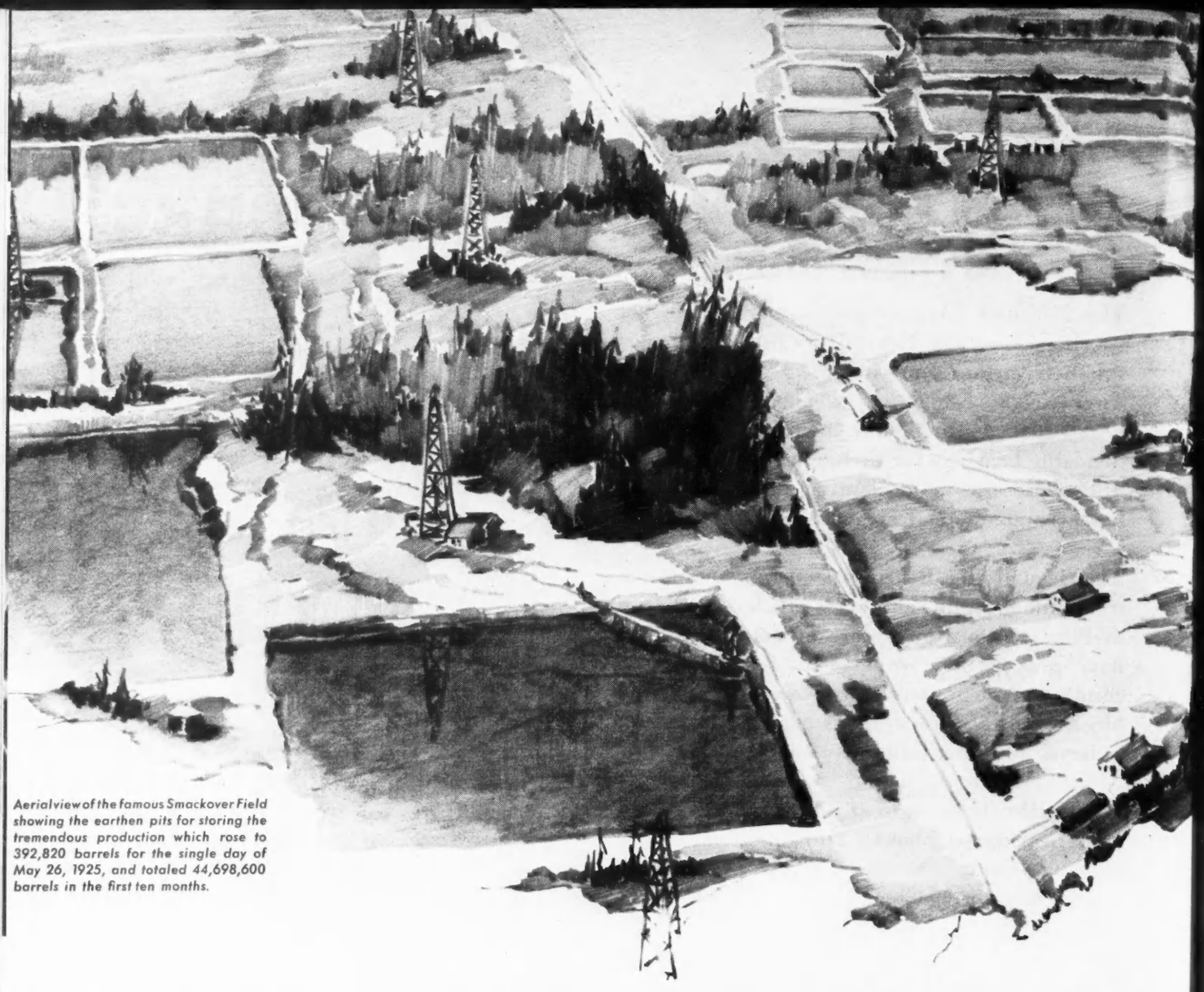

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AN OIL MAN'S CEMENT

'STARCOR' IS SPECIALLY MADE FOR USE IN DEEP HOLES AND WHERE TEMPERATURES ARE OVER 140°

When bottom-hole temperatures exceed 140°, the going gets tough. The deeper the well, the greater the risk that ordinary cement may stiffen before it gets in place. Thinning the slurry isn't the answer—because that may mean a soft core . . . What to do about it?

Two years ago we asked ourselves the same question. Oil men knew, and so did we, that no cement then available would fill the bill—not even 'Incor' with a ten-year record of outstanding oil-well performance where temperatures are less than 140°.

A different type cement was needed—a cement specially made for oil men to use in deep holes and where temperatures are over 140°.

Lone Star research chemists went to work to perfect a cement that would set slowly at high temperatures. That of itself wasn't so difficult. But the cement also had to pump easily, hold its water, and hang together so as to resist mud-contamination. It wasn't an easy job to combine all of these qualities in one product. But Lone Star chemists succeeded—just as they did years before with 'Incor'. This time they perfected an Oil Man's cement.

This Oil Man's cement is called 'STARCOR'. It does everything we wanted it to do—and more. For laboratory proofs have been confirmed by field results in dozens of deep holes. Here's the net of it:

'STARCOR'† pumps easily at 16 lbs. Sets slowly, even in hot holes. Yet, it hardens quickly. Cores cut at 3 days are hard and uniform, free from soft spots. "Cuts like a piece of solid formation," drillers say. Chemical tests of cuttings prove absence of mud contamination. And, in addition, 'STARCOR' is made to resist the effects of sulphate waters —assuring a long-life, gas-tight plug.

So, 'STARCOR' can honestly be called an Oil Man's cement, with the safety factor against quick-set built right into it at the mill—you don't have to try to get it by thinning down the slurry.

And 'STARCOR' is a Portland cement in all that the term implies. No adulterants or admixtures are needed. 'STARCOR' has all the desirable strength, durability, workability and other valued properties of 'Incor' and Lone Star—plus the made-to-measure qualities needed for deep-hole work. Use 'STARCOR'† on your next job—see what a real Oil Man's cement is like. Any Lone Star and 'Incor'* Dealer can supply you.

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THE OIL WEEKLY

FOR OIL AND GAS PRODUCERS
AND PIPE LINE MEN

ENGINEERING NEWS STATISTICS

WARREN L. BAKER, Editor

. . . this Week

THE Bureau of Mines recommended crude production during October is 88,110,000 barrels. This is a daily average of 2,842,300 barrels, a reduction of 21,700 barrels from September, but 288,100 barrels higher than a year ago. A small normal seasonal decline in gasoline consumption is reflected by the figures. The domestic motor-fuel demand for October is estimated at 42,230,000 barrels, or a daily average of 1,362,300 barrels. The bureau calculates that 86,370,000 barrels of crude will be necessary to produce the required gasoline. An anticipated crude export business of 2,400,000 barrels accounts for the remainder of the estimated crude oil requirements. **Page 24.**

THE petroleum industry may be one of the first trades affected by the Robinson-Patman anti-price discrimination act. The Federal Trade Commission, which administers the law, has been studying practices employed by oil companies, particularly with reference to filling station policies. It is believed the constitutionality of the act will be challenged immediately upon issuance of the first complaints, but in the meanwhile it is reported Patman plans to introduce a new bill that would prohibit manufacturers from engaging in retailing selling, which would include refiners. **Page 24.**

A FORMAL statement issued by the Republican National Committee charges that Congress and Secretary of the Interior Harold L. Ickes have adopted a program that deprives the public, especially the little man and small operator from participation and profit in the development of oil and gas-bearing public lands. It was charged that the cost of prospecting government lands for oil and gas has been raised from $32 to $1312 on the maximum area of 2560 acres alloted under any permit. **Page 26.**

SOUTH TEXAS, comprising some 60 counties, will drill approximately 3250 wells in 1936, which compares with 1950 in 1935 and 1387 in 1934. This increased activity has built up a sufficient reserve to definitely establish the territory as a factor in the nation's future source of oil supply. On July 1, 1936, there had been 10,177 oil producing wells completed on 88,921 acres and 836,436,953 barrels of oil estimated to have been discovered. Of this amount, 320,639,871 barrels had been produced, leaving a future recoverable known reserve of 515,797,082 barrels. **Page 41.**

AFTER a two-day conference the federal government has temporarily suspended its plans to satisfy tax claims by the sale of alleged East Texas hot oil. Several officials from the Texas attorney general's department, the U. S. Department of Justice and the Internal Revenue Bureau attended the conference in Washington. The Texas officials were protesting an attempt of the Revenue Bureau to sell 543,000 barrels of oil valued at $700,000, which the Texas Railroad Commission declared was illegal oil. After the proceeds of the sale had been used to pay off the government tax lien, the balance would go to the owner. Such a practice, it was claimed, would revive the hot oil racket in Texas. **Page 25.**

The Oil Man's Calendar

OCT. 2	Interstate Compact Commission Meeting, Oklahoma City, Oklahoma.
5–9	National Safety Congress Petroleum Section, Atlantic City, New Jersey.
8–9	American Institute of Mining and Metallurgical Engineers, Petroleum Division, Fort Worth, Texas.
8–9	National Road Oil and Asphalt Congress, Tulsa, Oklahoma.
19–23	American Institute of Mining and Metallurgical Engineers, Cleveland, Ohio.
25–30	American Gas Association, Atlantic City, New Jersey.
	American Association of Petroleum Geologists, Pacific Coast Section, Los Angeles, California.
NOV. 7–16	American Institute of Mining and Metallurgical Engineers, Western Meeting, Mexico City, Mexico.
9–12	American Petroleum Institute, 17th Annual Meeting, Chicago, Illinois.
20	Mid-Continent Oil and Gas Association, Kansas-Oklahoma Division, Tulsa, Oklahoma.
NOV. 30–DEC. 1	Independent Petroleum Association of America, Biltmore Hotel, Oklahoma City, Oklahoma.
NOV. 30–DEC. 4	American Society of Mechanical Engineers, Annual Meeting, Society's Building, New York.
	Mid-Continent Oil and Gas Association, Texas Division, Annual Meeting, Houston, Texas.

WITHOUT question the trend of development in South Texas is toward deeper drilling and more thorough exploration. As a result, equipment and method of drilling have been revised completely to meet these changes. Outstanding among improved practices is the increased accuracy of logging, testing and developing of producing horizons. **Page 36.**

SOUTH TEXAS is still in its infancy from a development standpoint. Tremendous potential possibilities remain to be explored at depths varying from near the surface to perhaps 15,000 and 20,000 feet. From a geological standpoint the area represents an almost complete picture of every type of structure. While in deeper drilling lies the greatest potentialities, present known horizons are by no means exhausted and must also be considered in attempting to forecast future possibilities of the region. **Page 51.**

PERMEABILITY measurements and their application to the oil industry is an important engineering phase of production engineering today. Although the law upon which permeability work is based has been known since 1856, only during recent years has it received much attention. Permeability measurements may be used in many ways, such as in water flooding, repressuring, estimation of reserves, rates of production, etc. Those companies who have pioneered such work, are beginning to reap the rewards for their expenditures. **Page 33.**

Cut Production

BUREAU RECOMMENDS YIELD BE REDUCED IN OCTOBER

WASHINGTON, D. C.

THE DAILY average United States production of crude oil for October, 1936, recommended by the U. S. Bureau of Mines to meet the estimated demand and provide for reasonable changes in stocks is 2,842,300 barrels. This is 21,700 barrels lower than the recommendation for September, but 288,100 barrels (11 percent) higher than the bureau's recommendation for October, 1935. The decrease in the recommendation for October, 1936, reflects chiefly a small normal seasonal decline in gasoline consumption, not quite offset by lower recommended withdrawals from motor-fuel stocks.

In discussing the current situation in the petroleum industry the bureau report called attention to the fact that during the last five weeks for which complete data are available (up to September 5), the production of crude petroleum was about 3,069,000 barrels, the highest sustained output ever recorded by the nation. During this period stocks of domestic crude declined at the rate of about 170,000 barrels daily, indicating a total demand of 3,239,000 barrels. The bureau's estimate of total demand for domestic crude for the same period was 3,047,000 barrels, indicating a "shortage" of 192,000 barrels per day. A part of the excess demand represented crude runs to stills to make gasoline, which would have come out of storage under the bureau's recommendations.

Motor-Fuel Demand Still High

The domestic motor-fuel demand for October is estimated as 42,230,000 barrels, a daily average of 1,362,300 barrels. The record of gasoline consumption in recent years indicates that the proportion consumed in October is steadily increasing. However, in reckoning the increase over a year this factor is obscured because the demand for October 1935 was abnormally high; consequently, the indicated increase for October 1936 is only 2 percent.

Motor fuel exports have been estimated at 2,400,000 barrels, the decline of 200,000 barrels from the September estimate being due to the seasonal influences.

Gasoline Stocks Decline

Stocks of finished and unfinished gasoline on July 31 amounted to 62,446,000 barrels, a decline of 4,931,000 barrels during the month. This withdrawal virtually equaled the bureaus recommendation of 4,990,000 barrels. According to the American Petroleum Institute, motor-fuel stocks declined about 4,500,000 barrels during August, 1936, compared with a recommended withdrawal of 5,000,000 barrels. If the 3,980,000 barrels withdrawal recommended for September, and the 1,940,000 barrel withdrawal recommended herein for October are met, stocks at the end of October will amount to about 52,000,000 barrels, a level reasonably close to minimum requirements.

Benzol production and "direct" sales of natural gasoline were estimated at 800,000 barrels, the same as in September. The required production of finished and unfinished gasoline in October, 1936, is consequently 41,890,000 barrels. This is distributed by districts as follows (thousands of barrels): East Coast 6,420; Appalachian, 1,530; Indiana-Illinois, 7,080; Oklahoma 2,930; Kansas-Missouri, 2,610; Texas Inland, 3,190; Texas Gulf, 8,730; Louisiana Gulf, 1,480; Arkansas-Louisiana Inland, 1,040; Rocky Mountain, 1,050; California, 5,830.

The seasonal trend in the refinery consumption of natural gasoline should near its peak in October, hence the ratio for blending has been raised to 8.5 percent in October from 7.1 percent in September. The latter, when applied to refinery production, is equivalent to 3,560,000 barrels, leaving 38,330,000 barrels to be made from crude oil. The estimated yield of cracked and straight-run gasoline is 44.38, or .18 percent below September. The application of this percentage gives 86,370,000 barrels as the crude oil necessary to produce the required gasoline.

Runs of foreign crude have been estimated at 2,600,000 barrels, or 300,000 barrels less than for September.

Exports of crude have been estimated at 4,000,000 barrels, or 300,000 barrels less than for September, while the estimate of fuel and losses has been raised, because of seasonal influences, to 2,200,000 barrels.

The recommended withdrawal from crude oil stocks was reduced from 90,000 barrels daily in September to 60,000 barrels daily in October.

The proper additions and subtractions give 88,110,000 barrels as the required production in October 1936. This represents a daily average of 2,842,300 barrels, which is distributed by states as shown in Table 1.

TABLE I

Recommendatory Levels of Required Crude Oil Production by States
(Daily Averages In Barrels)

STATE	October, 1936	September, 1936	October, 1935
Texas	1,106,900	1,123,900	1,025,500
Oklahoma	559,900	563,000	492,900
California	535,300	535,200	497,700
Louisiana	189,300	186,200	125,100
Kansas	155,000	160,000	146,100
New Mexico	74,200	71,600	50,600
Pennsylvania	44,400	44,500	40,000
Wyoming	37,300	37,200	34,300
Michigan	30,000	31,300	39,500
Arkansas	29,600	30,500	29,200
Kentucky	14,200	14,200	14,300
Montana	14,200	13,500	11,000
Illinois	12,000	12,200	10,800
New York	11,500	11,800	10,200
Ohio	11,400	11,400	10,700
West Virginia	10,400	10,600	10,000
Colorado	4,300	4,500	4,200
Indiana	2,400	2,400	2,100
	2,842,300	2,864,000	2,554,200

STUDYING INDUSTRY

Oil among first studied by price law commission

WASHINGTON, D. C.

INDICATIONS that the oil industry may be one of the first trades affected by the Robinson-Patman anti-price discrimination act were seen in Washington last week with the disclosure that the Federal Trade Commission, which administers the law, has been studying practices employed in the industry.

A major problem in the oil trade, it was revealed, is that known as "split accounts" where more favorable terms are granted an "exclusive distributor" than to one handling more than one brand of products.

For some weeks the commission has had men in the field making studies of the practices employed in a number of industries, as a preliminary to the issuance of the first formal citations under the law. Every effort is being made by the commission to ensure that its proceedings are "air tight" in order to minimize the danger of invalidation of the law by the courts.

Constitutionality of the act, it is believed, will be challenged immediately upon the issuance of the first complaints, but commission officials are confident that they can develop cases which will be upheld by the courts.

Another Bill Probable

At the same time it is reported that Representative Patman of Texas, coauthor of the measure, plans the introduction of new legislation in January, under which manufacturers would be prohibited from engaging in retail selling. While aimed, as was the anti-price discrimination bill, at mail order houses and chain stores, the effect of this legislation would be to drive the refiners out of the filling station business. No study, however, has yet been made of the constitutionality of such an act, but Representative Patman is said to be supported by the same groups of "independent" merchants that backed his original legislation.

Hot Oil Tax Sale

CONFERENCE RESULTS IN A DECISION TO DELAY CASE

WASHINGTON, D. C.

TEMPORARY suspension of government plans to satisfy tax claim by the sale of East Texas hot oil was agreed upon here last week following a two-day conference between federal and state officials who have been engaged in a controversy over the matter.

Involved in the controversy were 543,000 barrels of oil valued at $700,000 against which the Internal Revenue Bureau had assessed a claim of $240,000 for unpaid taxes.

The oil, it was said, had been in storage in East Texas for about 18 months, and the Texas authorities took no action toward declaring it illegal until after the federal government moved, when an injunction was sought to prevent its sale in satisfaction of the claim.

So important did Texas authorities consider the situation that Attorney General William McCraw and Assistant Attorney General W. F. Holt came to Washington, where they conferred September 22 and 23 with Assistant Attorney General John Dickinson, Assistant Solicitor General Golden W. Bell and Wendell Berge, Richard H. Hill and W. B. Watson Snyder, special assistants to the attorney general. Also present at the conferences were Arthur Kent, acting solicitor of the Internal Revenue Bureau, and G. W. Holland and E. B. Swanson of the petroleum conservation division of the interior department.

While the Texas authorities left Washington confident that the situation was satisfactorily settled, Department of Justice officials were less optimistic, although they refused to divulge how they viewed the matter.

Fear Similar Suits

Fearing that insistence by the government upon its method of collecting back taxes through the sale of siezed oil might open the state to unbridled violation of the Texas production restrictions, state authorities selected as a "test" case the government's claim for $240,000 income taxes against W. E. Pope of Corpus Christi, securing an injunction in the state courts which has been appealed to the federal court where it now awaits disposition.

Texas officials charged that the federal government is inconsistent in its policy with respect to hot oil, pointing out that the treasury "condones" its movement under the guise of selling it to satisfy income charges while the interior department is working with the states for its elimination.

"The tax collection plan of the treasury department, if carried through to its logical conclusion," State Attorney General McCraw said, in discussing the matter, "would release unbridled floods of oil which the state has marked down conclusively as illegal oil, into legal channels of commerce, in violation of the Connally hot oil act, in violation of the Texas conservation laws, and in violation of the state's hot oil confiscation law."

It was estimated by McCraw that the state has already sold 2,500,000 barrels of excess oil confiscated under its conservation act, the proceeds from which have amounted to more than $1,000,000.

Texas authorities contended that if the government sold the Pope oil to satisfy its tax claim, similar action would be taken in an additional half dozen seizures and hot oil operators will be quick to take advantage of a situation where they can dispose of large quantities of oil. It was explained that it would be possible for a hot oil producer to make an agreement with some person against whom the government had a tax claim, under an agreement to split the proceeds from the government sale. A quantity of oil would be turned over to the tax delinquent and the government would be enabled to seize it. Since the government is interested only in securing collection of its taxes, any excess resulting from the sale would be turned back to the taxpayer. In the Pope case, for instance, if the government sold the oil for $700,000, there would be $460,000 left after settlement of its claim.

Discuss Tender Board Position

Following the conferences Assistant Attorney General Dickinson asserted that inter-departmental coordination was the chief subject of discussion, but admitted that the meeting considered the question whether the federal tender board would have to grant a tender to oil siezed and sold by the Internal Revenue Bureau. Texas authorities contended that the tender board has taken the position that oil confiscated and sold at auction by the state is still illegal and may not move in interstate commerce and protested against any "legalization" of such oil for the federal government.

Although refusing to discuss the case, which he said was being watched by the terior department's solicitors, Secretary Harold L. Ickes asserted that the sale in the open market of confiscated oil would have just as disrupting effect as hot oil sold in violation of state and federal law.

While it was said following the conferences that no immediate action would be taken to sell the seized oil for back taxes—and that such action could not be taken until the courts had disposed of the state's injunction proceedings—there was no indication that the Internal Revenue Bureau would forego its demand for settlement of the tax indebtedness, although it was hoped some way would be found of dealing with the situation without nullifying the state's conservation program. State officials pointed out that the fate of the East Texas production restrictions rests upon the decision reached in this one case.

POSTPONE HEARINGS

TULSA

HEARINGS of four Tulsa men on pleas of removal to the federal district court of Oklahoma on indictments returned at Madison, Wisconsin, were postponed until November 2, when they appeared before the United States Commissioner September 21. They are Ira A. Smith, Standard Oil Company of Indiana; O. J. Tuttle, Empire Oil & Refining Company; Dewel K. Chamberlain, Pure Oil Company; and A. V. Bourque, Western Petroleum Refiners Association.

FEDERAL TAXES UP

Collections on gasoline up nearly 50 percent

WASHINGTON, D. C.

AN increase of more than 50 percent in collections from the federal tax on gasoline as compared with the preceding month is shown by the Bureau of Internal Revenue for August. Nearly $27,000,000 was collected from the four levies on oils and gasoline during the month, it was reported.

Gasoline tax collections in August totaled $22,552,321.67 against $14,512,178.75 in July and $20,477,876.89 in August, 1935, the bureau reported. Lubricating oil tax collections were $3,404,410.62 against $2,311,106.39 the preceding month and $2,844,294.94 last year, while $958,962.03 was obtained from the tax on pipe line transportation, against $866,406.75 in July and $1,040,370.70 in August of last year, and $76,698.03 was derived from the taxes on processing, against $71,481.99 in July and $178,230.68 in August, 1935.

Receipts from the gasoline tax for the first eight months of the current year were nearly $10,000,000 in excess of those for the corresponding period in 1935, the bureau reported, totaling $117,103,261.48 against $107,453,067.98. Receipts from the tax on lubricating oils were down more than $400,000, totaling $19,087,057.96 against $19,511,526.18, and a $700,000 drop was recorded in processing taxes, the rate of which was higher in 1935, which amounted to $569,913.21 against $1,300,391.22. Receipts from the pipe line tax, however, were up more than $600,000, being $6,865,594.08 against $6,234,287.72.

COMPACT MEETING

Commission to seek new members at conference

OKLAHOMA CITY

PLANS for encouraging legislation to allow other states to join the Interstate Oil Compact Commission will be considered at its next session here October 2. In issuing the call for this meeting, Governor E. W. Marland said representatives from 14 states had been invited. Membership is limited six states. It is the aim of existing membership to increase this list prior to seeking an extension of the federal statute by which the commission was created. Unless the law is amended or another passed, the Interstate Oil Compact Commission will cease in September, 1937.

Roosevelt's Record

HIS PROGRAM CHARGED WITH INJURING LITTLE OIL MAN

WASHINGTON, D. C.

CHARGES that Congress and Secretary of the Interior Harold L. Ickes have adopted a program which is "deliberately and cold bloodedly depriving the public, especially the 'little man' and the small operator from participation and profit in the development of oil and gas-bearing public lands" last week constituted the Republican answer to Secretary Icke's recent attack upon the oil activities of Governor Landon.

In a formal statement issued September 24, the Republican National Committee asserted that "not only has the Roosevelt administration frozen out the little fellow; it has also wilfully elected to turn over these natural resources to the wealthy and to the great corporations."

Costs Have Increased

The administration's program, in terms of actual cash, it was charged, has raised the cost of prospecting for oil or gas on government lands from $32 to $1,312 on the maximum area of 2560 acres alloted under any permit.

"Tens of thousands of permits were issued to people of all walks of life prior to the new deal legislation at a cost of from $10 to $32 as the total individual expense," it was declared. Today the average man, small prospector or independent operator is all through. There remain only the big oil companies and men of wealth who can take advantage of the elimination of public competition so conveniently arranged for them by the New Deal.

"This situation," the committee explained, "was made possible by the enactment of the O'Mahoney-Greever leasing bill on August 21, 1935. It was sponsored by Senator Joseph C. O'Mahoney, Democrat of Wyoming, and Representative Paul R. Greever, Democrat of Wyoming. Under the leadership of these men and with the active support and approval of President Roosevelt and Secretary Ickes, the bill became a law.

"Pursuant to this law and the regulations set up under it by the Department of the Interior, the applicant for a lease to prospect for oil or gas on any of the millions of acres of land owned by the Federal Government must pay in advance an annual rental of 50 cents per acre for each acre sought under the lease. A section of land, or 640 acres, is usually the minimum acreage for which a lease is issued, while the maximum is 2560 acres, therefore, the applicant must be able to pay a minimum of $320 or a maximum of $1280 before his application is even considered.

"The O'Mahoney-Greever Act superseded the act of February 25, 1920, which made provision for the disposal of oil deposits on public lands through prospecting permits or leases. Under the old act, permits were issued for land which was not known to contain oil, and where prospecting by the drill was necessary to determine whether or not the land actually contained oil or gas deposits. If the holder of a permit discovered oil or gas, his permit was changed to a lease and he was required to pay a royalty to the government. Under this law the government received enormous royalties and contributed to the development of the nation's resources as well as provided thousands of prospectors of little or no means with an opportunity to acquire oil lands and potential profit. The cost of the permit ranged from $10 for the first 640 acres and $2 for each additional 160 acres. Permits could include as many as 2560 acres, but applications were acceptable ranging from 40 to 2560 acres. If an applicant filed for 640 acres, he paid $10; if he filed for the maximum of 2560 acres, he paid the maximum charge of $32.

"But the New Deal changed all that," the committee asserted. "It not only excluded small prospectors by the imposition of the 50 cents an acre rental charge plus the $32 filing fee, but also has enabled large corporations to write leases which can be renewed forever. Once a lease is issued by the government, it cannot be voided unless it was obtained by fraud or mistake. These leases are issued under the provisions of a law passed by Congress, so there will be no grounds for claiming fraud or mistake, and the leases are issued for a certain number of years and 'so long thereafter as oil or gas is produced in paying quantities.' In other words, once oil is discovered the lease holder may continue to exploit the public land so long as it's of any value to him to do so."

FIFTH CORPUS PLANT

Work to start soon on 6000-barrel refinery

CORPUS CHRISTI.

ANOTHER refinery and terminal, the fifth project of this type to be announced this year, is to be constructed immediately on the Corpus Christi ship channel. The plant, which will have a capacity of 6000 barrels per day, will be owned by a company tentatively named Petrol Coastal Refining Company, and composed of a group of Eastern capitalists.

Site for the plant is on 40 acres in the Buena Vista addition, west of Corpus Christi and on the south side of the ship channel.

The plant likely will be a combination cracking and skimming unit and will make gasoline and furnace oils. Including a 500,000-barrel capacity terminal, the project will involve an expenditure of approximately $1,000,000.

The exact ownership of the project has not been announced, but it is understood that it will handle crude from the Corpus Christi and Saxet fields, nearby, both of which are served by Potter Pipe Line Company. This company has just completed storage and pipe line into the Clarkwood portion of these fields and has been serving the other areas for months.

Work has been commenced on the recently announced Amsco Refining Company plant. This plant, also on the ship channel, will have a capacity of around 5000 barrels per day. It is supposed to have completed a deal with The Texas Company for approximately 75,000 barrels of crude and will receive about 3000 barrels of crude per day from the Crude Oil Terminal Company. It is not known whether or not these are the same contracts, but it is likely that the latter company is fulfilling the requirements of the former. Crude Oil Pipe Line Company is enlarging its facilities so as to handle another 3000 barrels of crude daily from Duval County to Corpus Christi.

Amsco Refining Company is a subsidiary of American Mineral Spirits Company, one of the largest producers of painters' naphtha. This new plant will produce painters' naphtha and furnace oil from Loma Novia, Duval County, crude. This crude is rich in gasoline, but the gasoline is of a low gravity and does not blend too well with other gasoline stocks. The result is that this market for naphtha further increases the value of this Duval County crude reserve.

CUT RIG SCALES

Rodessa contractors will resume old wages

SHREVEPORT.

RIG building contractors in the Rodessa field anonunced September 25 that on jobs starting after September 27 the scale of pay for rig builders and pushers in effect prior to last July 23 will be resumed. This scale is $12 daily for rig builders and $14 for pushers. Since July 23 Rodessa contractors have been paying $14 to rig builders and $16 to pushers. The pay increase made July 23 was unanimous among Rodessa contractors at a time when East Texas contractors were also asked by workers to hike their pay, but for the most part this request was not granted in East Texas.

The contractors in Rodessa last week asked the rig builders to accept the old scale in effect before July 23, but the workers are said to have declined to do so. However, an official of the Rig Builders Union at Rodessa said Friday he knew nothing of the matter and that work was proceeding as usual.

ARIZONA GAS LINE

EL PASO.

WORK is now getting under way on a new line which is to supply natural gas for industrial and municipal purposes at Ajo, Arizona. Phelps Dodge Corporation mines at Ajo will be the principal consumer. The line will be constructed and owned by El Paso Natural Gas Company and will be solidly acetylene welded.

The new line, with outside diameter of 8⅝ inches, will extend from the main line of El Paso Natural Gas Company near Casa Grande, Arizona, to Ajo, a distance of 83 miles. The line will operate at 400 pounds pressure. Construction started September 8.

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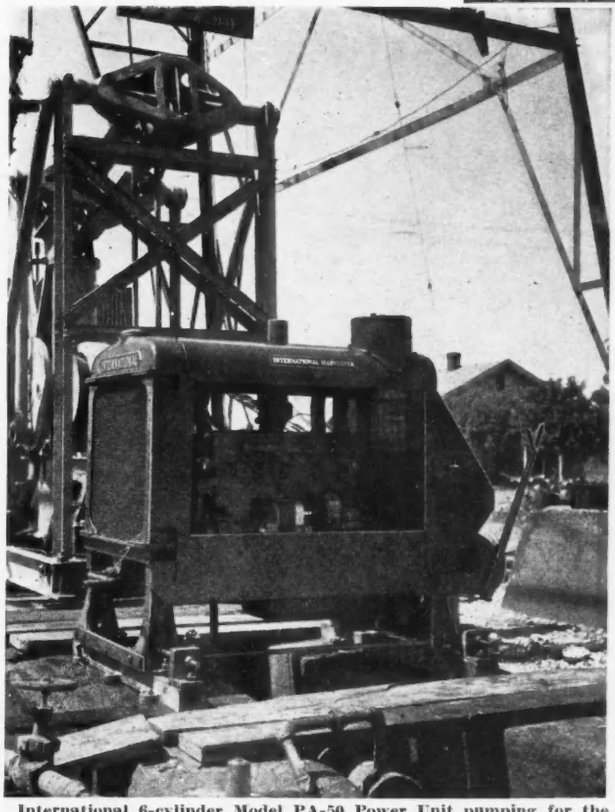

International 6-cylinder Model PA-50 Power Unit pumping for the Davon Oil Company in the Oklahoma City field. International Power Units range in size from 12 to more than 100 h.p., and there are 1½ to 5 h.p. engines for light-duty service.

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International Wheel and Crawler Tractors and Power Units (gasoline and Diesel) have proved their dependability and efficiency under hard service everywhere. And some of their best performance and economy records have been made in the oil industry where they have been on the job for years.

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MEN IN THE INDUSTRY'S NEWS

JOHN T. O'NEIL and **C. W. (TOMMY) ATKINS** have been elected president and vice president respectively of the newly formed Wellington Oil Company of Delaware, which has been organized to succeed Santa Clara Oil Company and Wellington Oil Company, Ltd. of California. Principal operating offices will be in San Antonio, Texas, as were those of the preceding concerns. The transfer of the operation of all properties was made officially on September 1.

Wellington Oil Company of Delaware is the outgrowth of an original partnership of Atkins and O'Neil, which entered San Antonio as a wildcatting concern in 1933. A number of wells were drilled in South Texas during that period, resulting in the establishment of several important producing areas.

In 1934, these operators, jointly with Continental Oil Company opened the Angelita field in San Patricio County. Last year, they opened the Government Wells sand, or main producing level, in the Seven Sisters field, Duval County. This year, they discovered the Loma Vista field in Duval County and the Clara Driscoll field, Nueces County. The latter field gives promise of being one of the big fields of the South Texas Gulf Coast.

Prior to the partnership of Atkins and O'Neil, Tommy Atkins was land man with Humble Oil & Refining Company and Shell Petroleum Corporation. John O'Neil was with the firm of O'Neil Brothers, Montana, until 1928.

CARL F. BEILHARZ, geologist for Pure Oil Company, Houston, has been transferred to Corpus Christi, where he will be district geologist for the company in that area.

R. V. WHETSEL, general manager of Cia. de Gas y Combustible "Imperio" S. A. at Tampico, Mexico, is spending a vacation in Colorado.

M. L. MAYFIELD is now employed by Cities Service Company as an engineer in the oil production and pipe line department in New York. He formerly was located in Western Kansas on special testing of subsurface equipment for Empire Oil & Refining Company.

J. B. BARNETT, assistant general manager, Huasteca Petroleum Company, (Standard Oil Company of New Jersey subsidiary) at Tampico, Mexico, is in the United States on a business trip.

J. HART DASTEEL, formerly with Union Oil Company, now is associated with Joseph Musgrove in the general practice of law. Offices are in the A. G. Bartlett Building, Los Angeles.

ALFRED SIMMONS, drilling superintendent of Compania Explotadora de Petroleo "La. Imperial" S. A., has returned to Pozo Rica, Mexico, after a vacation spent in California.

L. C. ROBERTS, division geologist in Texas and Louisiana Gulf Coast for Stanolind Oil & Gas Company, Houston, is vacationing in North Texas.

JOSEPH E. POGUE, consulting petroleum engineer and geologist of New York City, has been appointed a vice president of The Chase National Bank. Pogue has been closely identified with the petroleum industry for many years as a consulting engineer and is widely known as an authority on basic trends in that industry. He is the author of numerous articles and of several books dealing with the nation's oil resources and their conservation. In addition to his business affiliations as a consultant, Pogue has been active in various professional societies and associations. He is a Fellow of the Geological Society of America and of the American Statistical Association, and is a member of the American Association of Petroleum Geologists and the American Institute of Mining and Metallurgical Engineers.

FRANK R. CLARK, formerly head of the geological department, has been appointed vice president of Ohio Oil Company in charge of geology. His duties will

FRANK R. CLARK

also include the districts in Kansas, Texas, Oklahoma, Louisiana and Arkansas. Clark has been with the Ohio Company since July 1, 1923, and was moved to Tulsa with Mid-Kansas Oil & Gas Company from Mineral Wells, Texas, in November, 1923, and has lived here since then.

EDWIN W. CLARK, driller, who has been in the Tampico District, Mexico, for the past 10 years with various oil companies, has accepted a position as core driller with Cia. Petroleo Shell-Mex de Cuba, S. A. He recently arrived in Havana.

C. G. CLARK, assistant chief accountant of Cia. Mexicana de Petroleo "El Aguila" S. A. at Tampico, Mexico, is in England on a vacation. Upon his return, he will make his headquarters in Mexico City.

WILLIAM F. CHISHOLM, former supervisor of the minerals division of the Louisiana Conservation Commission, last week assumed his duties as chief oil and gas engineer of the Rodessa field (Louisiana side), for the Louisiana Conservation Commission. Chisholm will be directly in charge of the enforcement of the new gas-oil ratio order promulgated week before last by Conservation Commissioner W. G. Rankin with the endorsement of Governor Richard Leche, after data were submitted by the Rodessa Operators Committee showing gas waste in that field. The Rodessa Operators Committee and Chisholm held an all-day conference in Shreveport, Thursday, at which details of enforcement were discussed. The committee pledged Chisholm its full support in bringing the gas-oil ratio in line with the recent order.

Soon after his discharge from the army in 1919, in which he served overseas as a lieutenant of engineers, Chisholm joined the geological staff of Sinclair Oil Company in Shreveport. Later he was connected in a similar capacity with Arkansas Natural Gas Company and Roxana Petroleum Company, leaving the latter company in 1926, to accept appointment as supervisor of the minerals division, Louisiana Conservation Commission, in which capacity he served until 1929, when he resigned to accept a post with Halliburton Oil Well Cementing Company.

ANDREW MILEK, chief geologist of Mexican Sinclair Petroleum Corporation at Tampico, Mexico, is in the United States on a brief business trip.

GEORGE F. SMITH, treasurer of Continental Oil Company, Ponca City, has been elected a director of Southland Royalty Company. He succeeds H. K. V. Thompkins who resigned. The meeting of the board of the royalty concern was the occasion for voting a quarter dividend of 10 cents per share, payable October 15 to stockholders of record September 30.

C. B. ECHOLS, assistant purchase agent of Mexican Sinclair Petroleum Corporation at Tampico, Mexico, is in Mexico City on vacation.

J. F. LUCEY, independent oil operator of Dallas, has returned home after spending several months in Europe. He was accompanied by Mrs. Lucey. In a newspaper interview at Dallas Captain Lucey, a former officer in the army, was quoted as saying Europe obviously is preparing for another war, although he does not expect hostilities within the immediate future.

HU. M. HARRIS, Humble Oil & Rening Company, Houston, has been appointed both national secretary of the American Petroleum Institute's Division of Production Rotary Drilling Equipment Committee and chairman of the Engineers' Sub-Committee. Members of the sub-committee now are: M. L. Cashion, Gulf Oil Corporation, Houston; V. E. Farmer, Union Oil Company of California, Los Angeles, Arthur Olson, Olson Drilling Company, Tulsa; A. W. Thomp-

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4⅝"	20' 24' 30'	1⅞"	3½"	831 lbs. 1,022 lbs. 1,308 lbs.
6¼"	20' 24' 30' 40'* 50'	2 13/16"	4½"	1,375 lbs. 1,708 lbs. 2,203 lbs. 3,039 lbs. 3,870 lbs.
7"	20' 24' 30' 40'* 50'*	3 13/16"	5 9/16"	1,662 lbs. 2,035 lbs. 2,595 lbs. 3,528 lbs. 5,561 lbs.
8"	20' 24' 30' 40'* 50'	4½"	6⅝"	2,108 lbs. 2,576 lbs. 3,277 lbs. 4,445 lbs. 5,613 lbs.
9"	20' 24' 30' 40'* 50'*	4½"	6⅝"	2,638 lbs. 3,278 lbs. 4,261 lbs. 5,883 lbs. 7,505 lbs.

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son, Mandeville & Thompson, Inc., Houston; J. E. Toussaint, Standard Oil Company of California, San Francisco; and W. V. Vietti, The Texas Company, Houston.

GEORGE HILL, JR., president of Houston Oil Company, Houston, was in New York, September 21.

H. G. VENABLE, independent operator, has returned to Tampico, Mexico, after a three months' motor trip through the western states.

MRS. MYRTLE OLDHAM, wife of F. R. Oldham, purchasing agent for Gulf Oil Corporation, Houston, died September 20, after being ill about two weeks.

RUSSELL B. BROWN, general counsel of the Independent Petroleum Association of America, Washington, and C. E. Buckner, executive manager, Tulsa, were in Dallas several days the past week conferring with oil men of the district. They had just returned from the West Coast.

J. E. BURDEN, of the firm Sheldon & Burden, drilling contractors at Tampico, Mexico, is in New York.

E. N. KERSEY, master mechanic of Mexican Gulf Oil Company at Tampico, Mexico, is spending a vacation in San Antonio.

ROBERT W. ATHA of Stewart-Atha, Inc., oil producer of Mt. Pleasant, Michigan, state chairman for Michigan on the National Advisory Board of the First International Consumers' Petroleum Exposition to be held in Convention Hall, Detroit, from December 5 to 13 inclusive, is organizing a committee of 200 representative oil men in Michigan to act as the Michigan Host Committee for the Exposition. This committee will arrange for the reception of large delegations from other states who are arranging to attend the exposition.

With Wirt Franklin, president of Wirt Franklin Petroleum Corporation of Ardmore, Oklahoma, and former chairman of the Planning and Coordination Committee, the code authority for the entire petroleum industry under the NRA in Washington, as national chairman of the advisory board, state chairmen are being selected in all states and leading men in the oil and allied industries will act as members of the advisory committee.

State chairmen who already have accepted these positions include C. M. Boggs, of Arkansas City, Kansas, president of Kanotex Refining Company and president of Western Petroleum Refiners Association, for Kansas; J. D. Collett, president of the General Mid-Continent Oil and Gas Association, of Fort Worth, for Texas; Colonel T. H. Barton, president, Lion Oil Refining Company, El Dorado, Ark., for Arkansas; William H. Bell, president National Stripper Well Association, Lawrenceville, Ill., for Illinois; R. A. Broomfield, executive vice president of Barnsdall Corporation, of Los Angeles, for California; C. E. Foreman, Indianapolis, president of Midwestern Petroleum Corporation, and treasurer of the Indiana Independent Petroleum Association, for Indiana; William J. Dinneen, secretary and general manager, W. E. Dinneen, Inc., of Cheyenne, Wyoming, for Wyoming; Waller Chenault, oil producer of Louisville, Ky., for Kentucky; Joseph Moorhead, executive secretary, Pennsylvania Grade Crude Oil Association of Oil City, Pa., for Pennsylvania; William B. Way, general manager, International Petroleum Exposition and Congress, Tulsa, Okla., for Oklahoma; R. W. Dunn, general manager The American Oil Company, Hattiesburg, Miss., for Mississippi; and C. H. Bliss, vice president, Nash Motors Company, Kenosha, Wisconsin, for Wisconsin. Charles T. Newton, an official of Ford Motor Company of Dearborn, Mich., is chairman of the Automotive Division.

The exposition will be the first ever held by the petroleum industry to acquaint the public with facts relating to the oil industry and allied businesses and to show how closely the welfare of millions of people in this nation are woven in the operations, taxes and expenditures of this 13 billion dollar enterprise.

BEGINNING

A SERIES OF SIX
ARTICLES ENTITLED

A STUDY OF PERMEABILITY MEASUREMENTS AND THEIR OIL INDUSTRY APPLICATION

By K. H. CLOUGH
Chemical Engineer

PERMEABILITY MEASUREMENT WORK has reached the point that it is for the first time receiving the attention it merits. Recognizing the value of compiling such data, and desiring to present its readers with comprehensive, authoritative and early information on this important research study, THE OIL WEEKLY has obtained for exclusive publication a series of articles that have been written only after many hours of careful laboratory work. The first of these six articles appears on page 33 of this issue.

This series of articles will deal with the fundamentals of permeability measurements and the underlying mechanics of such determinations. A number of important conclusions and ideas are presented that we believe will be of assistance in future permeability work, of which much remains to be accomplished.

The articles present the simplification of equipment and procedure, show how data may be profitably obtained, and how to apply the information to such production problems as water flooding, repressuring, reserve estimations, rates of production flow, etc. For the first time, the elimination of mathematical calculations from permeability work is proposed, and the method by which this is accomplished is described along with graphs showing in detail how such measurements may be made. Since cores from producing formations may be either consolidated or unconsolidated, some attention also will be given to the measurement of unconsolidated sands, which in the past has been practically impossible.

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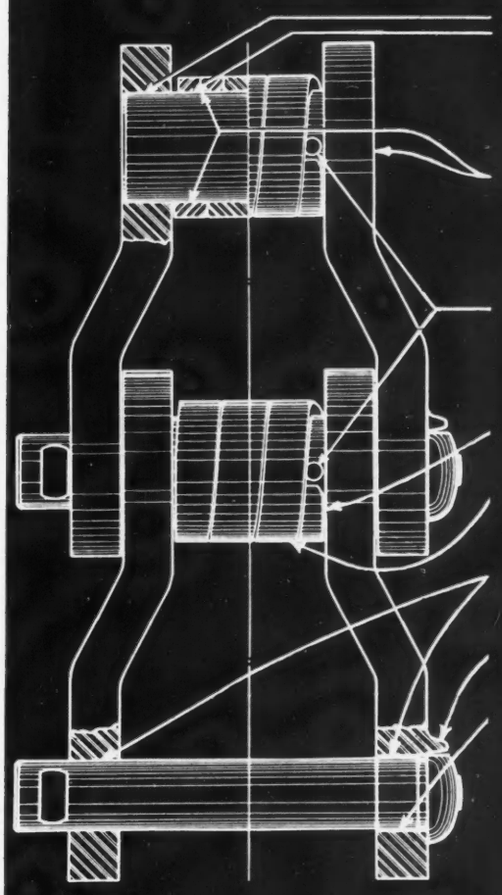

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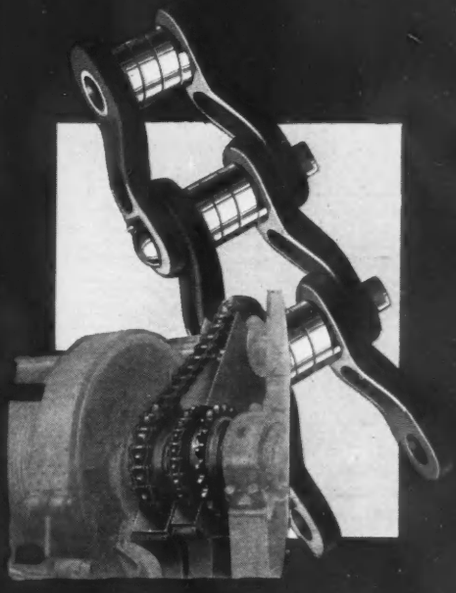

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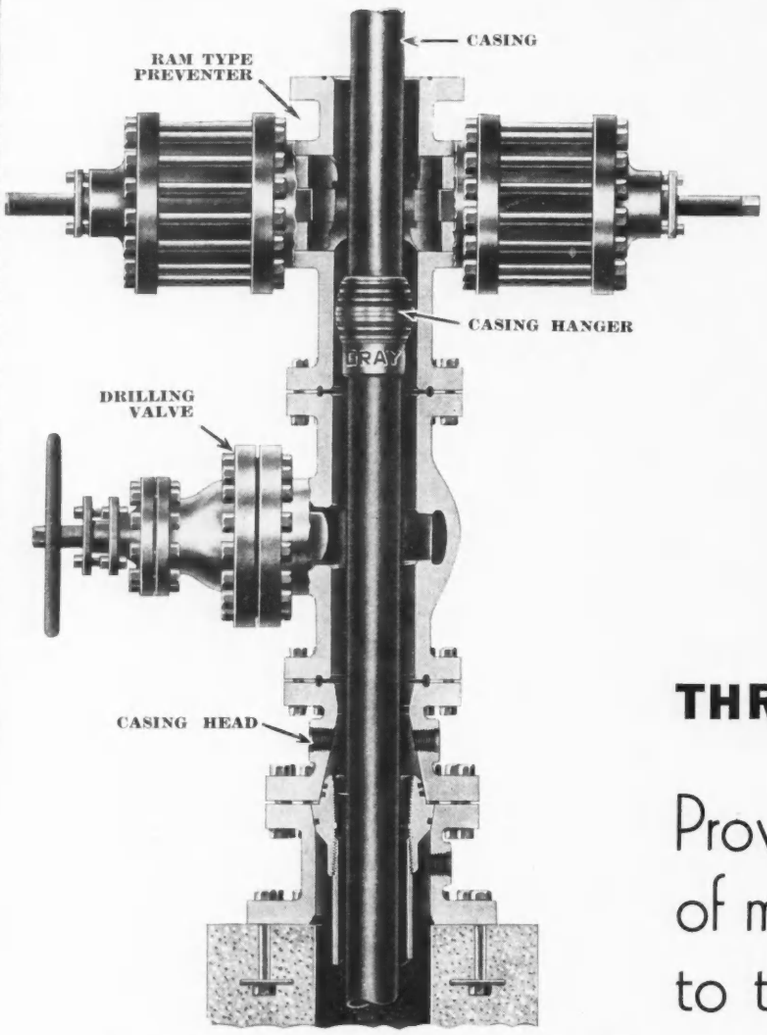

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A Study of Permeability Measurements

AND THEIR APPLICATION TO THE OIL INDUSTRY

By K. H. CLOUGH, Chemical Engineer,
W. H. Curtin & Company, Inc.

PART I

PERMEABILITY measurements and their varied applications, have, in the past, been ignored to the extent that but a small fraction of the attention merited by the value of such work has been given. This has been due in part to the expensive equipment which usually has been thought necessary, partly because of the time factor, and in part to the limited knowledge of the use of such measurements, which have all combined to deter those who otherwise might have been interested. The field of permeability work, in particular as regards the oil industry, has been receiving some attention. Those companies who have pioneered such work and who have done the research work necessary to accumulate data from such measurements are beginning to reap the rewards which their expenditure of labor and money have made available to them, and those companies not prepared to pursue permeability measurements in connection with oil production are losing what would otherwise be invaluable information both for present production and future expectancy. Permeability measurement has reached the point where any company, however limited its research work and however small its petroleum production engineering staff, may equip a laboratory for such work, as well as for complete evaluation work, at but a fraction of the former cost.

Numerous problems have been encountered and, no doubt, will be found in any work connected with the study of well cores, and permeability measurements are not free from such problems. This series of articles, dealing with the fundamentals of permeability measurements and the underlying mechanics of such determinations, proposes to present such simplifications of equipment and procedure and to show how such data can be profitably obtained and applied to such production problems as water flooding, repressuring, estimation of reserves, rates of production, etc. It is also desired to present data gathered on permeability determinations in the form of graphs and to describe the construction and operation of permeability equipment that combines ease of operation with simplicity and low initial cost. Considerable work has been done with this equipment to eliminate the mathematical calculations which formerly consumed more than half of the time required for permeability measurements, and the method by which these are eliminated is described together with graphs showing in detail how such measurements may be made. Since cores from producing formations either may be consolidated or unconsolidated, some attention has been given to the measurement of the characteristics of unconsolidated sands, though much remains to be done in this field.

Permeability and its Companion Terms Defined

In speaking of permeability measurements, it is, of course, necessary that such measurements be made in terms of unit permeability. The name given the unit of permeability is the "darcy", after the French scientist H. D'Arcy, and the subdivision of this unit, which is 1/1000 darcy, is called the "millidarcy" and is in more common use than the larger unit. Permeability may be defined as the state of being passed through. The permeability of a porous medium is, therefore, the measure of that medium's ability to permit the flow of fluid through its pores or interstices. By definition, the darcy is the rate of flow of one cubic centimeter per second of a fluid of one centipoise viscosity through a cross-section area of one square centimeter of a porous medium under a pressure differential of 760 mm. of mercury (one atmosphere) per centimeter length of the porous medium. This definition is applicable for viscous flow of the fluid, but the so-called "Darcy's law" cannot be applied where turbulent flow is encountered. Obviously, we may, therefore, say that as long as the fluid flow does obey Darcy's law the flow may be said to be viscous, whereas, in such cases as do not obey Darcy's law, the flow is said to be turbulent. The openings or pore spaces in a core are quite small and it is doubtful as to whether turbulent flow could be had through these pore spaces, since turbulent flow is not thought to exist in capillary openings of .506 mm or smaller. The terms "turbulent" and "viscous flow" have been referred to constantly in all work on permeability measurements, since the basis of the law whereby such measurements are based is laid on viscous flow of fluid. Webster defines viscous as "adhesive or glutinous", whereas, the word turbulent is defined as "tumultuous or agitated."

It can be seen readily that with small capillary openings, where the wall or side of the opening is but an extremely short distance radially from the center of the moving fluid and the relation of surface to volume of fluid moving is quite large, there

should naturally be more adhesiveness of the fluid than in the case of a large tube where the center of the moving fluid is radially a longer distance from the walls of the opening through which it is passing. Therefore, for very fine or capillary pores the flow of fluid may be said to be viscous under practical pressure conditions, whereas, for larger pore spaces the flow may become turbulent under pressures which would be very much lower than those necessary to produce viscous flow through the smaller pore spaces.

The flow of any fluid through a porous medium is, naturally, dependent upon the viscosity of the fluid itself, thus the greater the viscosity of the fluid, the lower the rate of flow under a given pressure gradient for a given diameter opening. This means that lighter oils will flow at a faster rate than heavier oils and that a gas, such as air, will flow at a faster rate than a liquid, such as water, under the same pressure gradient and through openings of the same size. Water and oil may be spoken of as "non-compressible fluids", whereas, gases, such as air, will come under the head of "compressible fluids." The formulae for flow of compressible and non-compressible fluids will differ, of course, since the pressure gradient through a porous medium will vary with compressible fluids, due to the expansion of the fluid as it reaches the zones of pressure. A practical example of this lies in cores taken from saturated formations. A considerable amount of gas usually is dissolved in the oil contained in such cores, under pressures, which for the purpose of example, may be said to be 2000 pounds. Thus, as this core is brought to the surface and the pressure reduced, the gas in solution, or held in the core as gas under pressure, will expand, and thus, when the oil content of this core is determined in the laboratory and its saturation factor obtained, even though the formation is known to have been saturated, the core will not show 100 percent saturation but will show a figure closer to 50 percent.[1]

For making permeability measurements, it is usually preferred from an operating standpoint to select a fluid whose viscosity is low, as, in that event, the pressures necessary to force such a fluid through the pore spaces of a core sample will be comparatively low and such pressures are much easier to obtain in the laboratory and can be more accurately measured than higher pressures which would be required through the use of a fluid of high viscosity. Also, the rate of fluid flow under a given pressure will be greater for a fluid of low viscosity than for a fluid of high viscosity and any errors made in the measurement of such flows will, of course, be minimized by the use of larger fluid flow.

Constantly associated with the term "permeability" is another term, also relating to the pore spaces of a core sample, which is called "porosity" which is further divided into "effective" and "absolute porosity". The absolute porosity of a medium is the relation of the pore spaces, or interstices, between the granular components of the porous medium and the porous medium taken as a whole. Expressed in other words, the volume of the openings divided by the total volume of the porous medium is the percent absolute porosity of the medium. In numerous cases, the pore spaces in a given porous medium are not inter-connected and do not possess the ability to transmit fluid. We may, therefore, say that the porosity of a porous medium is affected by the cementation between the granular components of the medium. The absolute porosity is, therefore, the total interstitial space between the sand grains, whereas, the effective porosity is the relationship of the connected pore spaces to the total volume of the porous medium under consideration. Thus, it may be said that the absolute porosity of any porous medium is always equal to, or greater than, the effective porosity of the same medium. It might be said that the permeability and the porosity of a medium should, therefore, be directly related since it would appear that two core samples having the same porosity should also have the same permeability or fluid-transmitting property. This is not the case, since the effective porosity will tell us how much total internal spaces exist that are inter-connected, but these spaces will vary in size due to variation in the size of the component sand-grain particles, and these variations in opening size will cause variation in the fluid-transmitting properties of the core. Thus, the relationship is complex rather than simple. It might be said that two samples having the same porosity and composed of the same percentages of sand grains of definite sizing would have the same permeability, and this relationship has been used to some extent; however, it does not seem feasible to use such a method of determining permeability. The degree of cementation between sand grains is also a factor and would prohibit definite predication of one of these factors, knowing the other two.

History of Permeability Measurement

Since 1856, this being the year in which H. D'Arcy carried out a series of graphic experiments dealing with fluid flow, considerable work has been done along the same lines and at no time has any work disproved the empirical formula derived by D'Arcy on the permeability measurements in conjunction with fluid flow. The particular problem on which D'Arcy was working in the year 1856 concerned the flow of water through layers of sand in water filters and was, essentially, a problem in hydraulics. During the course of his experimentation, D'Arcy accumulated sufficient data for laminar flow to enable him to derive the empirical equation as a method of solution of such flow through porous media. It is important to note at this point that the basic principle underlying his solution was worked out 10 years earlier by a fellow countryman named Poiseuille while experimenting with the movement of liquids in tubes of small diameter. The United States Geological Survey has over a period of approximately twelve years made a considerable number of experiments with water flow and, in every case, D'Arcy's law has been substantiated by the results of such experiments. Many observers from the period 1856 to the present time have studied water flow under pressure gradients as low as two inches to the mile, and this law has been found to hold even under such conditions. It is quite probable it will hold for gradients even lower. The basis of our present permeability work lies in the experimentation of D'Arcy and too much credit cannot be given his solution.

The second part of this series of six articles will be published next week, when the mechanics of permeability measurements will be discussed.

[1] "Evaluation of Oil Cores" by K. H. Clough, The Oil Weekly, June 15, 1935, page 67.

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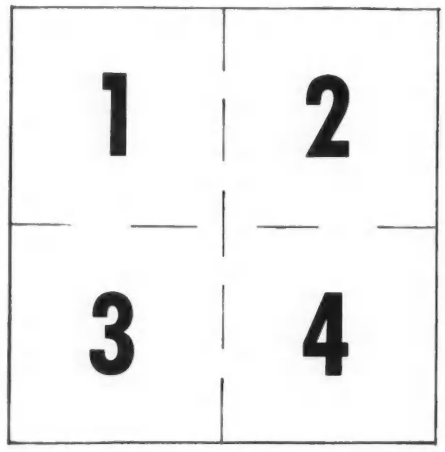

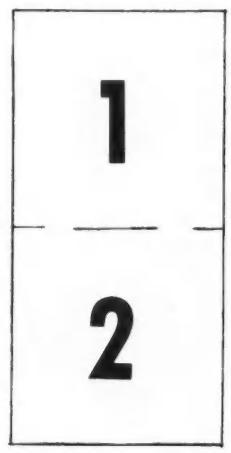

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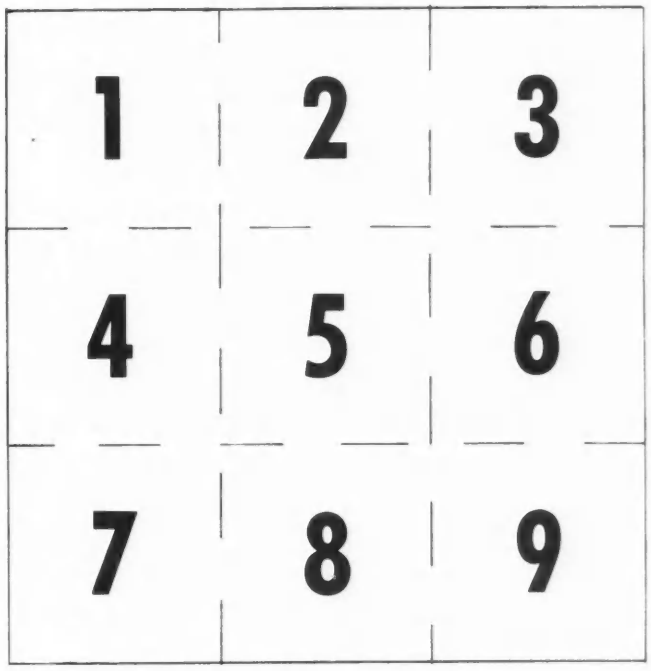

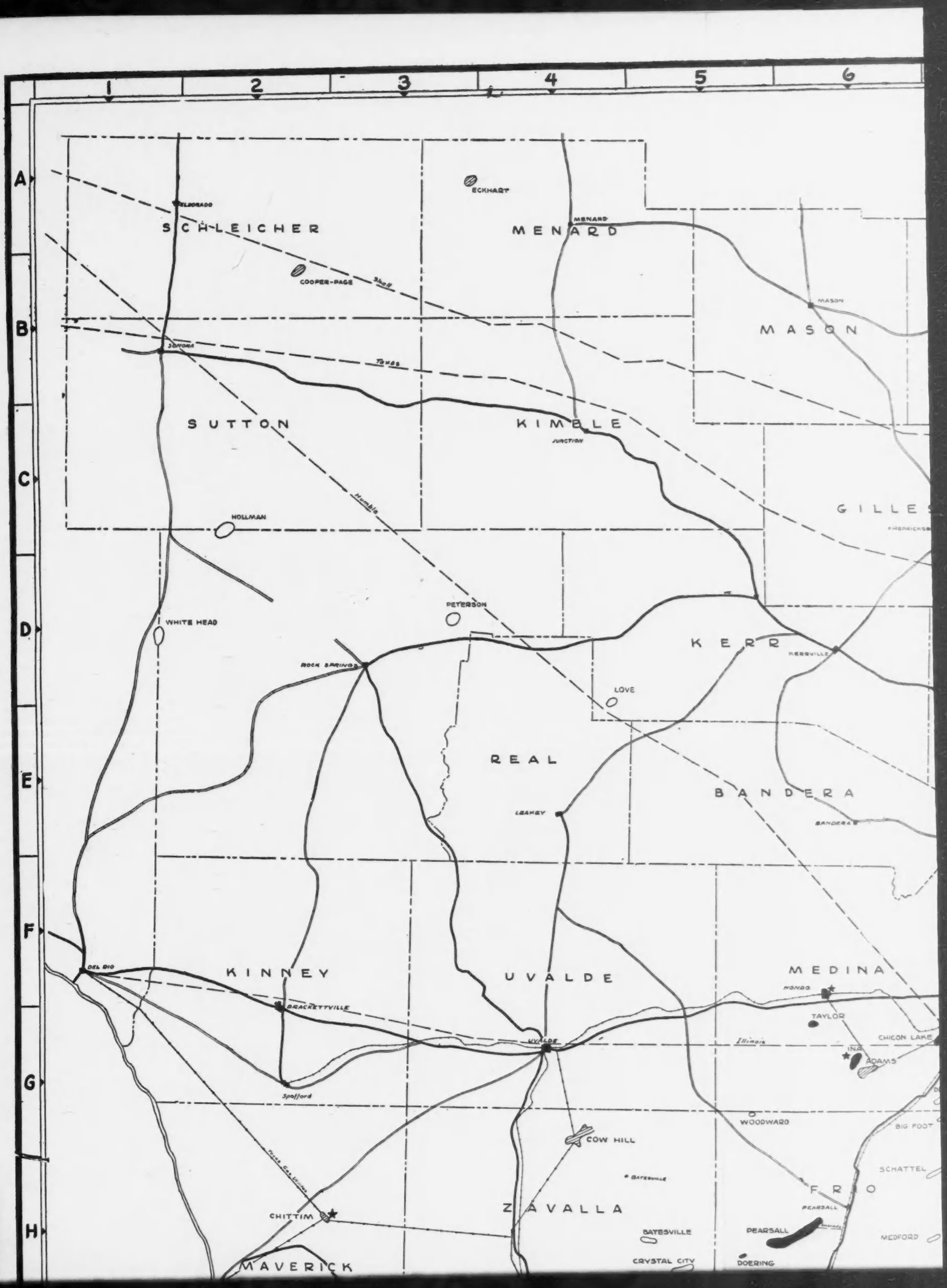
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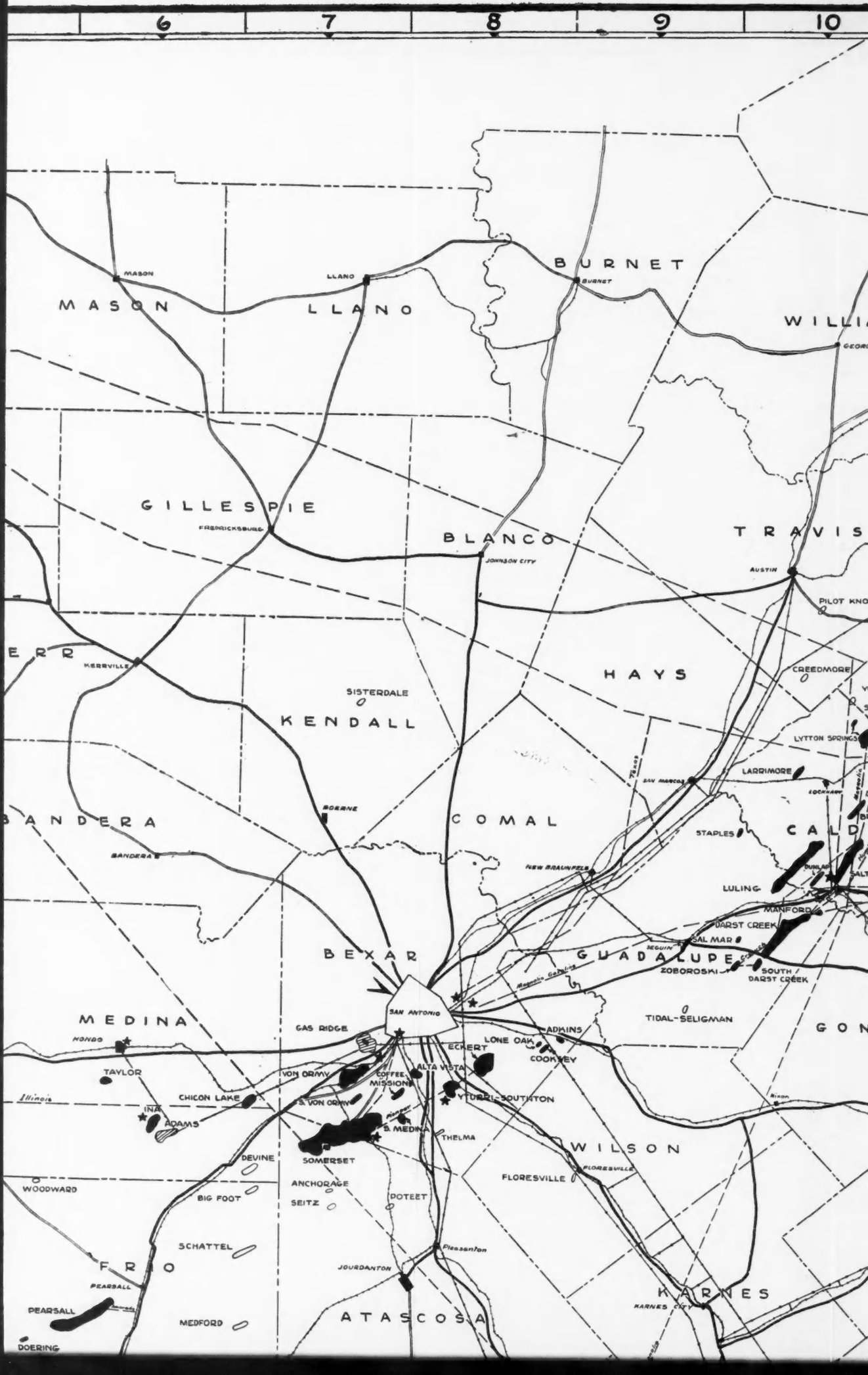
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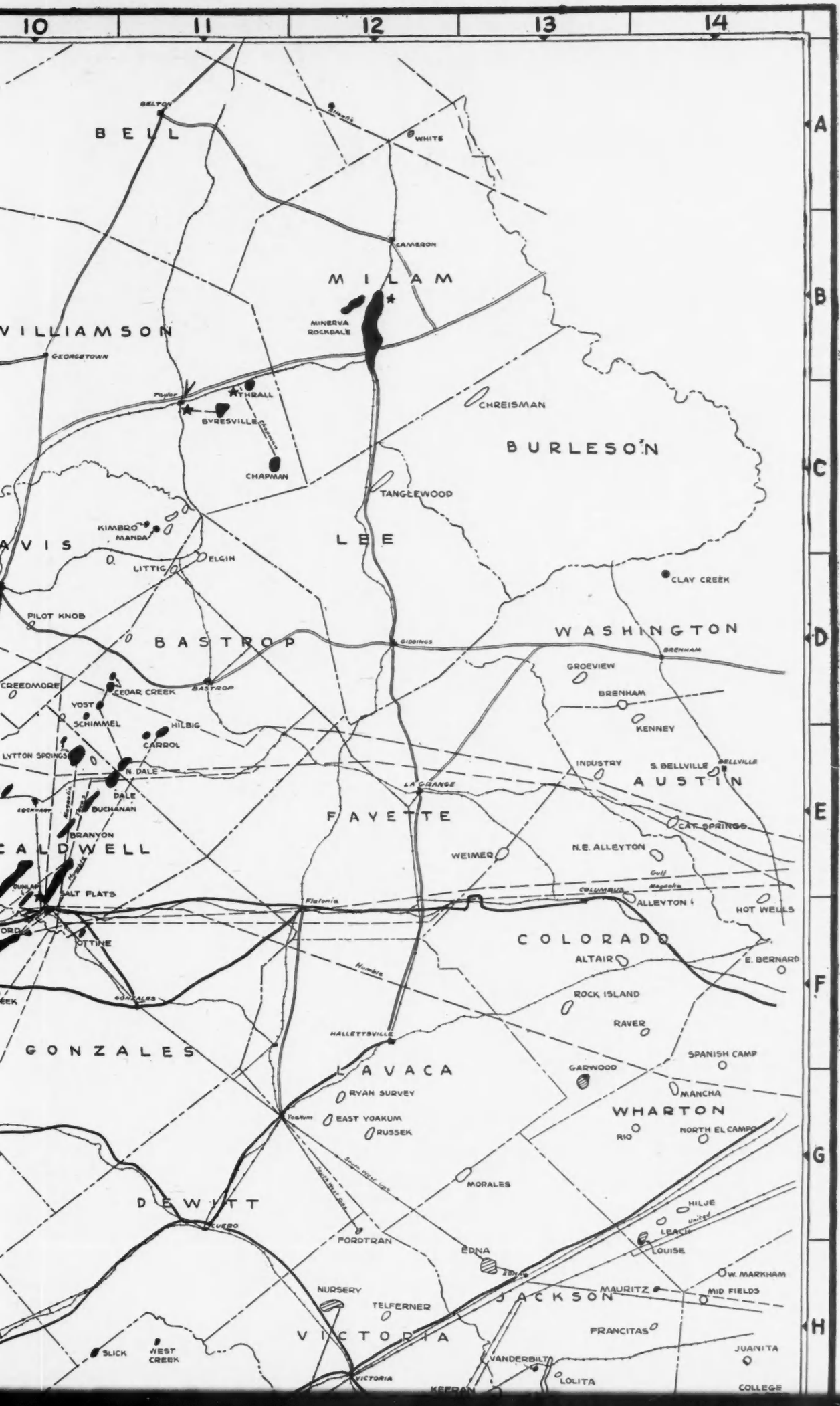
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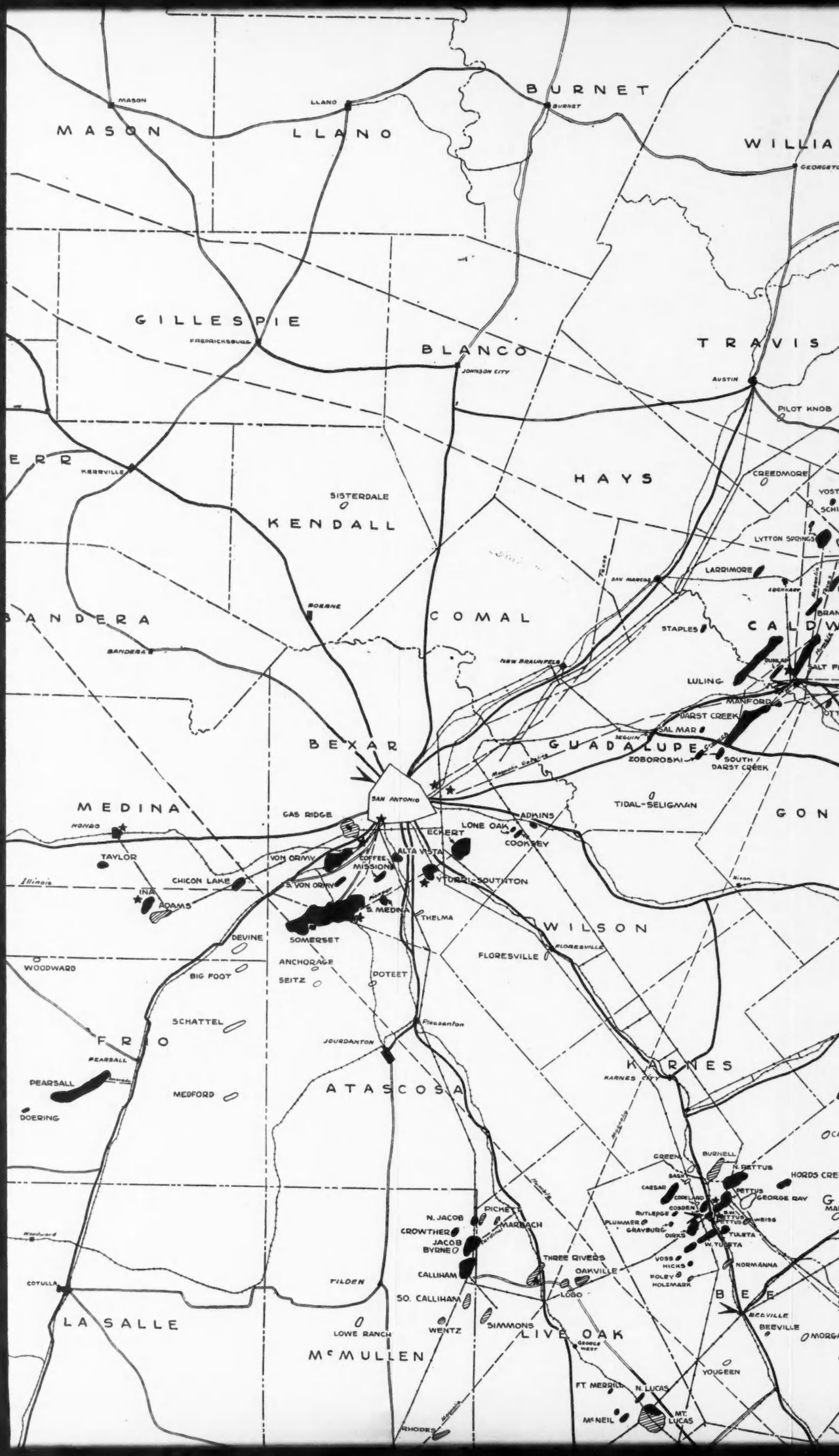
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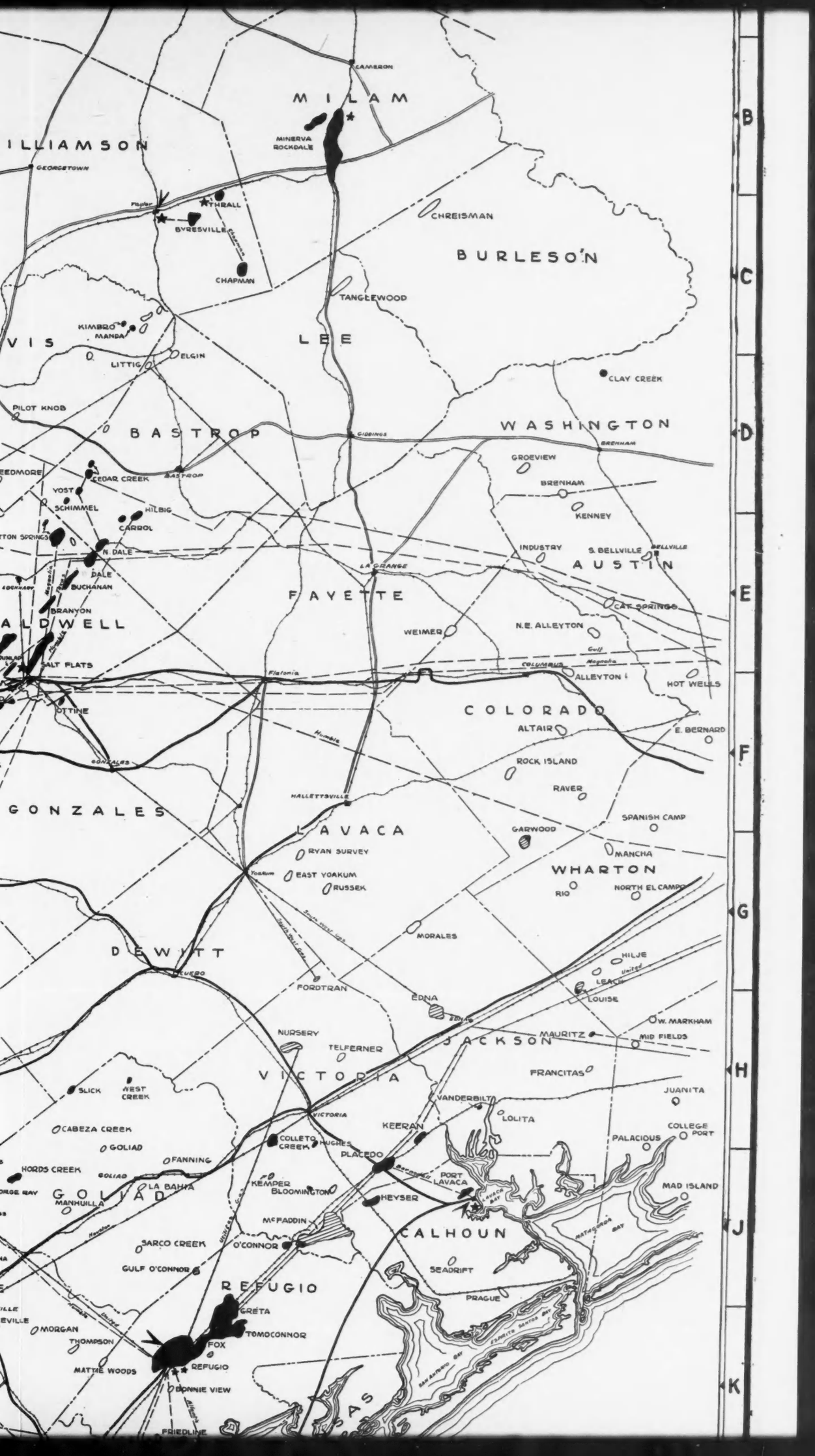
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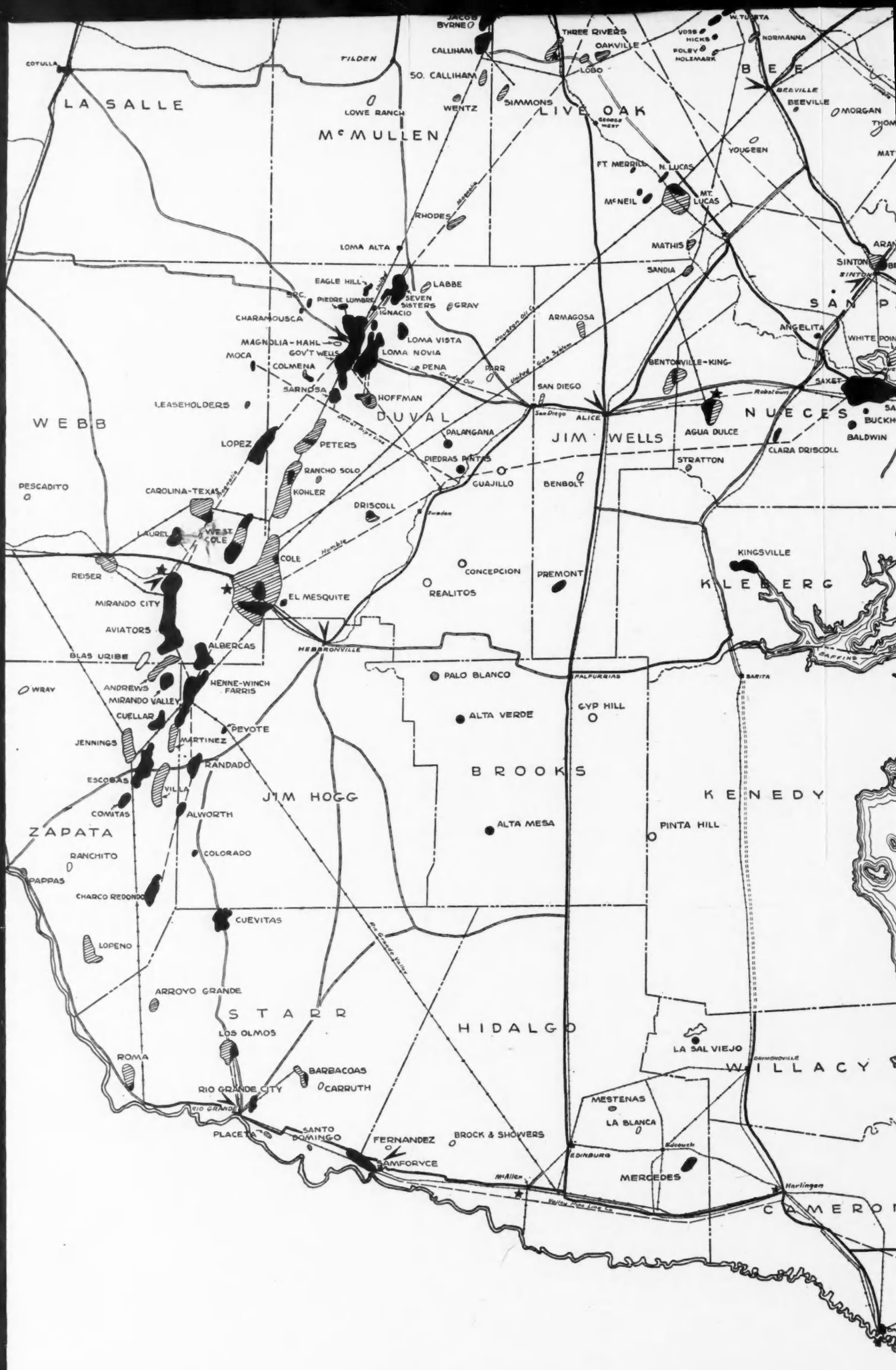
Cabeza Creek	H—10	Friedline Pasture	K—11	Magnolia-Hahl	L—7	Realitos	N—8	Whitehead	D—1
Carrizo Springs	J—3	Gray Ranch	L—8	Manhuilla Creek	J—10	Sarco Creek	J—11	Wray	N—5
Carruth	R—7	Green	J—10	Mattie Woods	K—11	Schattel	H—7	Yougeen	K—10

Supplement to **THE OIL WEEKLY, September 28, 1936**


LA SALLE
McMULLEN
LIVE OAK
BEE
WEBB
DUVAL
JIM WELLS
NUECES
KLEBERG
KENEDY
BROOKS
JIM HOGG
ZAPATA
STARR
HIDALGO
WILLACY
CAMERON
SAN PATRICIO
COTULLA
FILDEN
CALLIHAM
SO. CALLIHAM
LOWE RANCH
WENTZ
SIMMONS
THREE RIVERS
OAKVILLE
LOBO
BEEVILLE
MORGAN
YOUGEEN
FT MERRILL
N. LUCAS
McNEIL
MT. LUCAS
RHODES
LOMA ALTA
MATHIS
SANDIA
SINTON
EAGLE HILL
LABBE
SEVEN SISTERS
GRAY
IGNACIO
CHARAMOUSCA
ARMAGOSA
ANGELITA
MAGNOLIA-HAHL
GOV'T WELLS
LOMA VISTA
LOMA NOVIA
MOCA
COLMENA
PENA
PARR
SARNOSA
HOFFMAN
SAN DIEGO
ALICE
GENTOWVILLE-KING
SAXET
AGUA DULCE
CLARA DRISCOLL
BALDWIN
STRATTON
LEASEHOLDERS
PALANGANA
PIEDRAS PINTAS
GUAJILLO
BENBOLT
LOPEZ
PETERS
RANCHO SOLO
KOHLER
PESCADITO
CAROLINA-TEXAS
DRISCOLL
LAUREL
WEST COLE
COLE
REISER
MIRANDO CITY
EL MESQUITE
CONCEPCION
REALITOS
PREMONT
KINGSVILLE
AVIATORS
ALBERCAS
BLAS URIBE
HEBBRONVILLE
PALO BLANCO
PALFURRIAS
BARITA
WRAY
ANDREWS
MIRANDO VALLEY
HENNE-WINCH
FARRIS
CUELLAR
PEYOTE
MARTINEZ
JENNINGS
RANDADO
ESCOBAS
VILLA
COMITAS
ALWORTH
ALTA VERDE
CVP HILL
ALTA MESA
PINTA HILL
RANCHITO
COLORADO
PAPPAS
CHARCO REDONDO
CUEVITAS
LOPENO
ARROYO GRANDE
LOS OLMOS
ROMA
BARBACOAS
CARRUTH
RIO GRANDE CITY
PLACETAS
SANTO DOMINGO
FERNANDEZ
SAMFORYCE
BROCK & SHOWERS
LA SAL VIEJO
MESTENAS
LA BLANCA
EDINBURG
MERCEDES
McAllen
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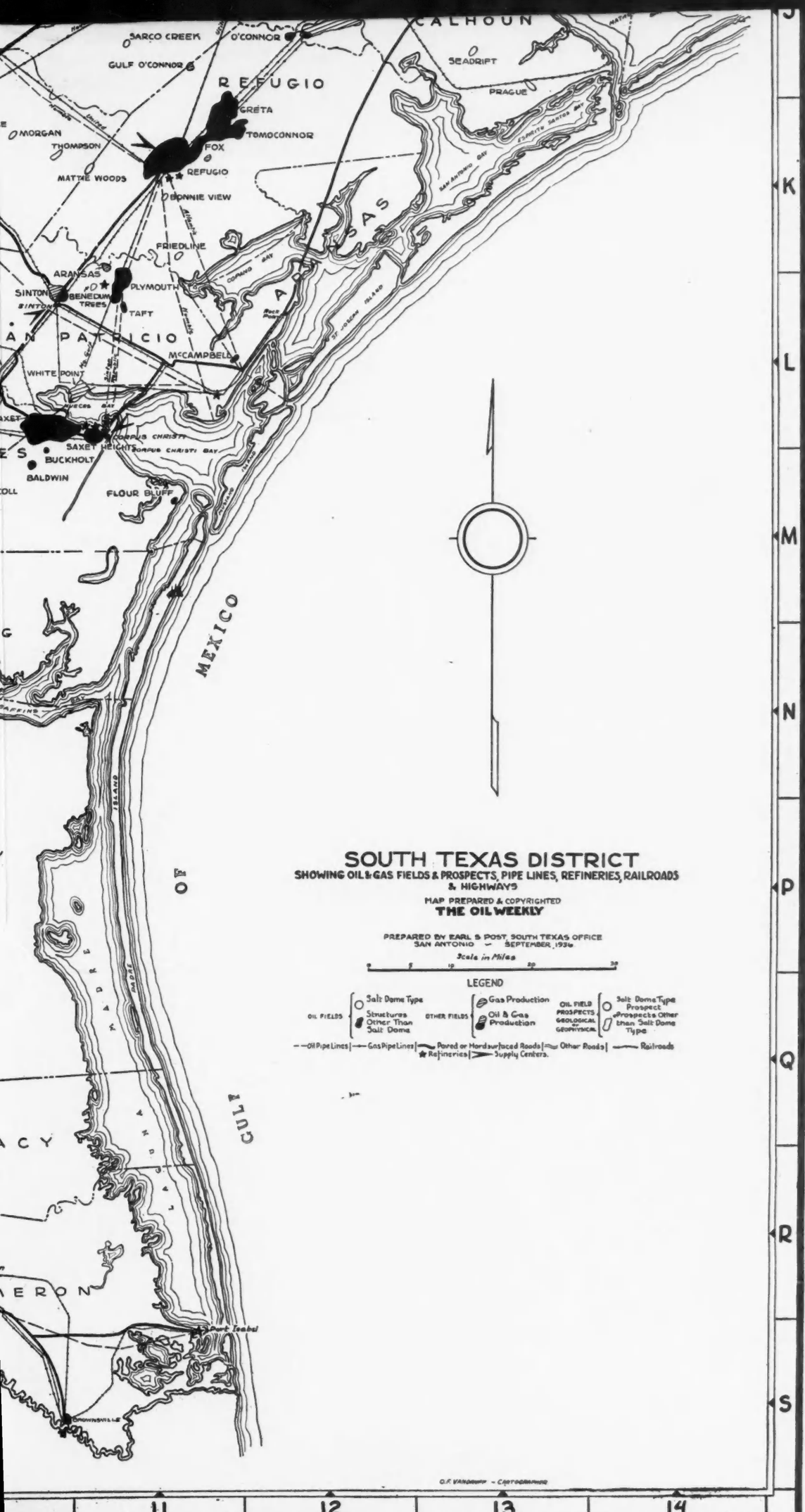


SOUTH TEXAS DISTRICT

SHOWING OIL & GAS FIELDS & PROSPECTS, PIPE LINES, REFINERIES, RAILROADS & HIGHWAYS

MAP PREPARED & COPYRIGHTED
THE OIL WEEKLY

PREPARED BY EARL S POST, SOUTH TEXAS OFFICE
SAN ANTONIO — SEPTEMBER, 1936

Scale in Miles
0 5 10 20 30

LEGEND

OIL FIELDS: Salt Dome Type; Structures Other Than Salt Dome
OTHER FIELDS: Gas Production; Oil & Gas Production
OIL FIELD PROSPECTS, GEOLOGICAL OR GEOPHYSICAL: Salt Dome Type Prospect; Prospects Other than Salt Dome Type

Oil Pipe Lines | Gas Pipe Lines | Paved or Hard-surfaced Roads | Other Roads | Railroads
Refineries | Supply Centers.

O.F. VANDRUFF — Cartographer

SOUTH TEXAS

Engineering and Development

With Special Insert Map

September 28, 1936

IMPROVED LOGGING, TESTING AND COMPLETING A FEATURE OF DEEPER

South Texas Drilling

By JOHN F. CAMP, President,
John Camp Drilling Company
San Antonio, Texas

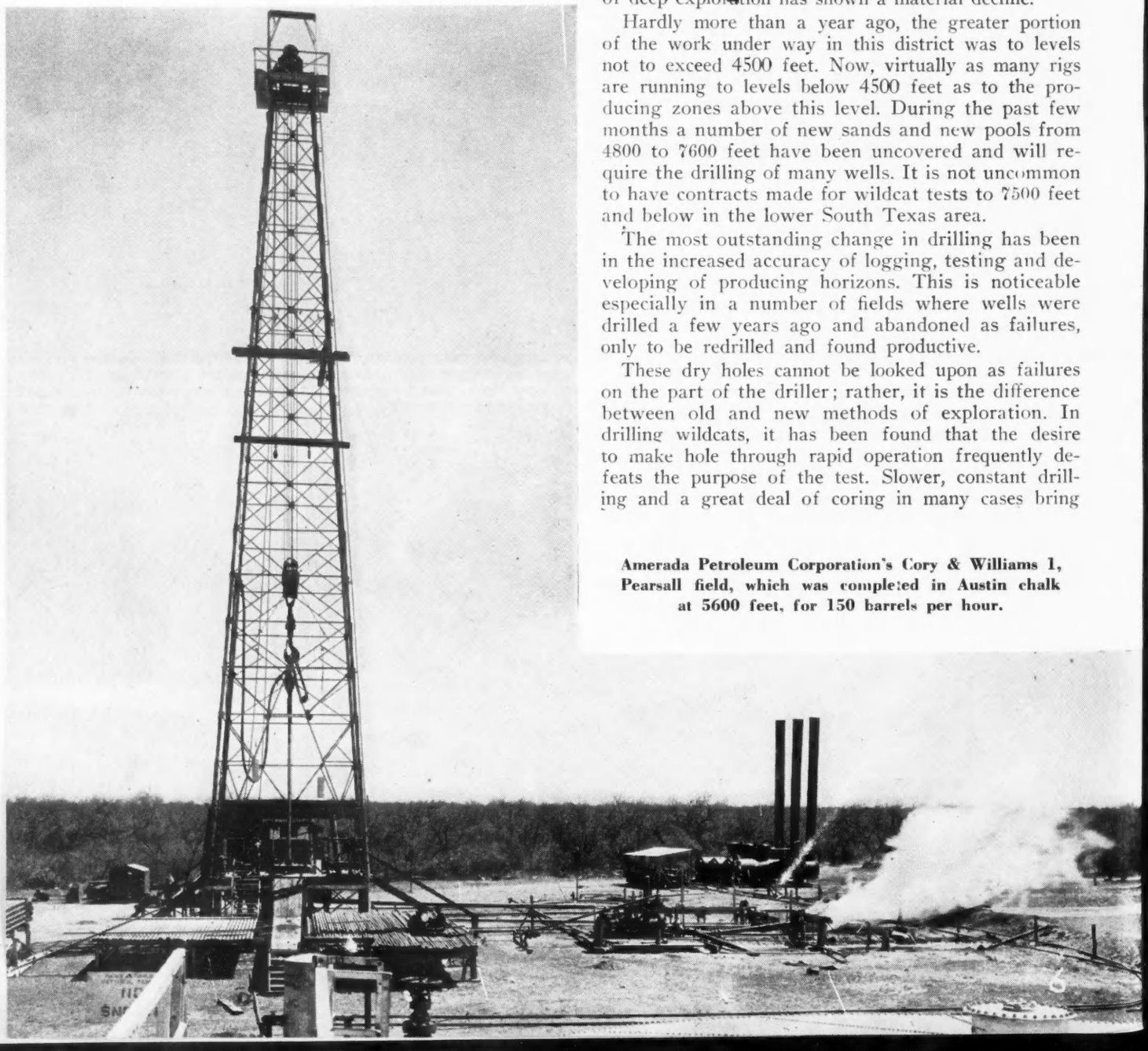
TREND of development in South Texas definitely is toward deeper holes and more thorough exploration. The result is equipment and methods of drilling have been revised completely to suit these changes.

The small, light rigs of a few years ago have been replaced in many cases by massive pieces of construction. Operations have been so speeded that the cost of deep exploration has shown a material decline.

Hardly more than a year ago, the greater portion of the work under way in this district was to levels not to exceed 4500 feet. Now, virtually as many rigs are running to levels below 4500 feet as to the producing zones above this level. During the past few months a number of new sands and new pools from 4800 to 7600 feet have been uncovered and will require the drilling of many wells. It is not uncommon to have contracts made for wildcat tests to 7500 feet and below in the lower South Texas area.

The most outstanding change in drilling has been in the increased accuracy of logging, testing and developing of producing horizons. This is noticeable especially in a number of fields where wells were drilled a few years ago and abandoned as failures, only to be redrilled and found productive.

These dry holes cannot be looked upon as failures on the part of the driller; rather, it is the difference between old and new methods of exploration. In drilling wildcats, it has been found that the desire to make hole through rapid operation frequently defeats the purpose of the test. Slower, constant drilling and a great deal of coring in many cases bring



Amerada Petroleum Corporation's Cory & Williams 1, Pearsall field, which was completed in Austin chalk at 5600 feet, for 150 barrels per hour.

to light new producing zones, stray sands, etc., which under speedy drilling possibly would be logged as other formations. In fields where a definite producing horizon has been established, and is being developed, such speed records are possible without serious result.

The advent of new devices, further studies of the general territory and the bringing to light of a wealth of new information through continued exploration, suggests still greater successes in many of the heretofore condemned territories.

Among the more important developments as aids to South Texas drilling have been continuous coring devices, new testing tools, electrical logging devices, the gun perforator, etc. While each is a separate and distinct piece of equipment, they are closely allied.

Coring Has Improved

The entire coastal zone, including the Pettus, Mirando, Corpus Christi and Rio Grande Valley districts, are highly lenticular. These lenses may cover only a few acres or may be unusually large, but there is a comparative inconsistency when attempting to correlate from a general standpoint. It is necessary, therefore, to have a good picture of the hole in portions where these sands could and probably do occur. It has been the practice of numerous concerns to core holes solidly from the top of the zone where these sands may occur to the bottom of the section. In a few cases wells have been cored from top to bottom, although their contracts have been as deep as 8000 feet.

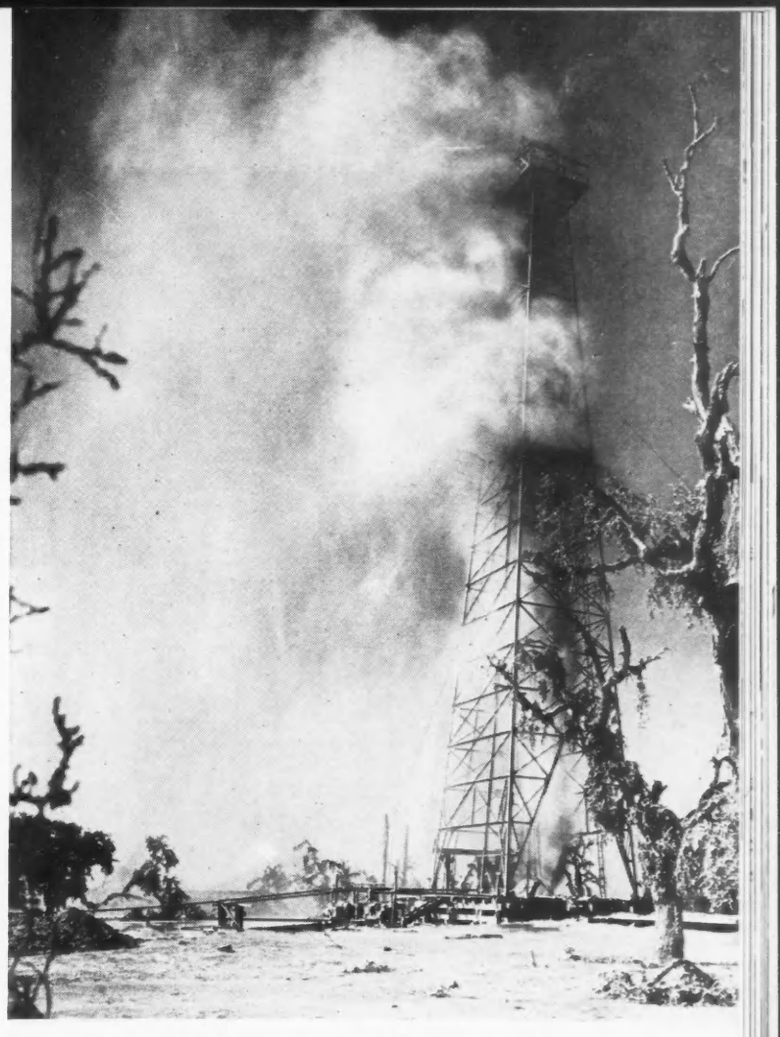
The older methods of coring with inconsistent equipment would have made this an expensive and almost impossible task. New types of core devices, however, enable the project to be carried on almost as quickly as straight drilling and at comparatively the same cost. Yet, the hazard of wildcatting has been substantially reduced.

Failures have in the past occurred in many cases after fair cores have been taken and drill-stem tests attempted. With the development of both information on tests and more efficient testing equipment, it is possible to gain a great deal more accurate information concerning the possibilities of a sand producing.

A development of key importance to South Texas and a prime reason for some of its newer fields, is the electric formation-logging device. Despite care in drilling, potential oil- and gas-bearing zones sometimes are missed or fail to appear promising when drilled. The records of this logging device have been sufficiently encouraging to prompt the sidetracking and redrilling of the sand or testing through perforated casing.

Gun perforating, likewise, has gone hand in hand with increased formation data. It has been possible in many cases to materially reduce gas/oil and water/oil ratio in wells, and in other cases to convert apparent gas wells into oil producers. This especially is noted in several of the older fields where development has been resumed as a result of this equipment.

While these developments have become more or less commonplace in the oil fields of the present day, their advent is worth consideration as a factor in bringing about the present development. This especially is true when a glance at some of the field maps shows producers completely surrounding supposedly dry holes



Mission Drilling Company's G. A. Ray 11, Bee County wildcat, running wild.

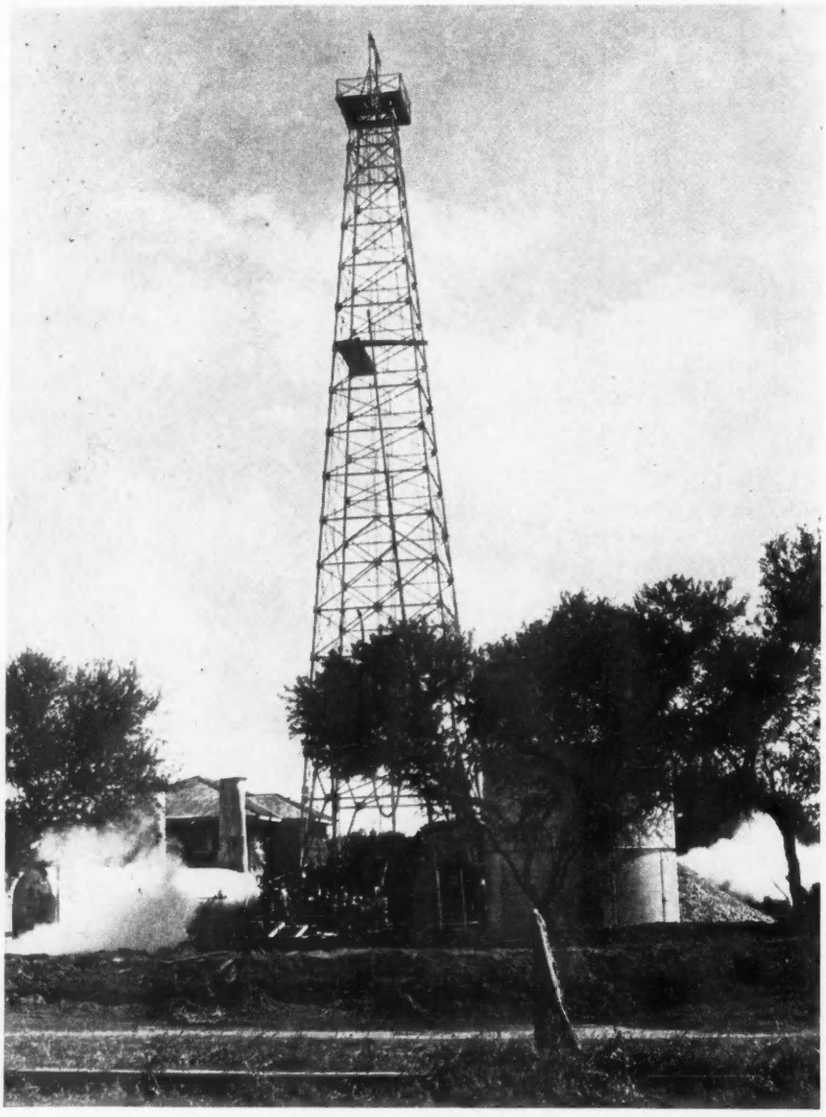
at the same level. A discovery several weeks ago was a wildcat offsetting a failure by only 25 feet. Several of the most important fields in the Mirando district would have been opened years sooner if more adequate drilling, coring and testing information had been available.

Drilling Costs Low

In the discussion of South Texas drilling, it should be considered by districts. The problems and costs vary materially according to conditions. Likewise, the figures to be included will show only the approximate outlay involved in operations due to the fact that local conditions alter situations.

In the Corpus Christi sector, the majority of wells are to sands between 4000 and 5800 feet, and completed wells to these sands range in price from $16,000 to $32,000. Wildcats in the 7000-foot bracket, considered on a dry hole basis, should involve an expenditure of nearly $3.00 per foot, including all costs.

On the extreme southwest side of South Texas is the Rio Grande Valley, where two types of development are found: one being to shallow sands between 1000 and 3000 feet, while the other is centered around 7000- to 8000-foot production. The 1500-foot wells, including pumping equipment, etc., should be completed for not more than $4500, while the 2750-3000-foot producers of the Samfordyce sector cost approximately $8500-$9000 each. An actual figure on the cost of the producers below 7000 feet is difficult as each presents its own problem in this area. It is probably safe, however, to figure the expenditure, including



Rig operating in the front yard of a large home in a Corpus Christi residential section.

completion into the tanks, at $50,000. A failure, of course, scales down proportionately for equipment.

The wells drilled along this portion of the Gulf Coast are drilled rather easily due to softness of the formations. Several outstanding problems, on the other hand, make it a treacherous place in which to operate. A multiplicity of high-pressure gas sands constantly present the hazard of a blow-out. In addition, the lenticular sands make considerable coring and high drilling care essential. To further add to the desirability of skilled workers is the possibility of a poor well if improperly handled. It readily can be seen that even though drilling is rapid, operation costs remain comparatively high due to conditions such as are mentioned above.

The next trend of fields to the north include the Mirando and Pettus districts. The Pettus sand fields find the majority of their production between 3500 and 4500 feet. Inasmuch as the sands above the Pettus horizon seldom provide commercial production, only a few markers must be cored. Likewise, the drilling is comparatively easy with few hard formations. It is possible under these circumstances to drill and complete producers in the Pettus sector to 4500 feet for as little as $17,500, including equipment. A failure will scale down to about $12,000.

Following this trend to the southwest into the Mirando district, wildcatting costs show relative increases, but field operations are generally lower. There are a multiplicity of shallow sands to the regular producing levels between 2000 and 3000 feet. Due to this condition, wildcats must be cored carefully to check these possible producing-sand lenses. After development of a field actually begins, the cost of drilling and completing producers is surprisingly low, wells being drilled and completed within a week to 10 days, generally the former. Producers in the Government Wells zone, about 2500 feet deep, cost approximately $8500 into the tanks. A failure in wildcat territory, properly cored, on the other hand, will cost about $7000. Some deeper drilling has been done in this sector, but as a whole the development is limited at this time to wells above 3000 feet.

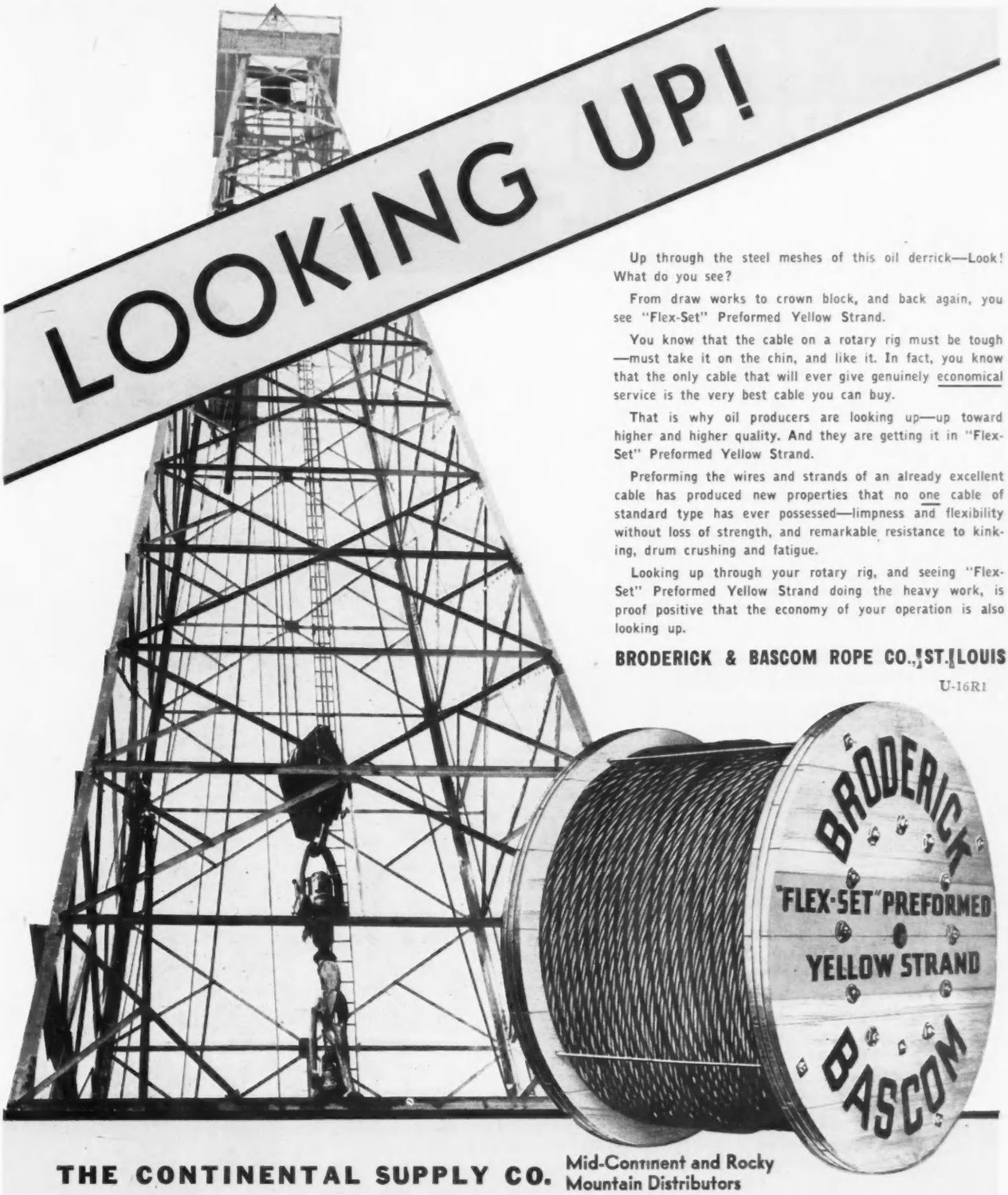
The upper sector of this area, commonly referred to as the Crowther district, is centered around 1000-foot development, in which wildcat failures cost around $2500 and producers about $3500, complete.

The Balcones fault zone is broken into three districts, the deep zone, the Luling area and the Navarro sand pools. The deeper development is comparatively new and has proved unusually expensive. Deep producers in the 5600-foot chalk area of the Pearsall field, Frio County, cost in the neighborhood of $55,000 to drill and complete, while wildcats to the 6500-foot Edwards lime, on basis of dry holes, cost about $40,000 to $45,000. Following up the trend where these formations are found at this level, such costs prevail.

In the Luling sector, Serpentine, Austin chalk and Edwards lime production ranges from 2000 to 2600 feet with completion costs on producers averaging $8000. The cost of a dry hole to this level is about $6500.

The small producing area south of San Antonio is made up of wells from the Navarro-Taylor sands at 500 to 1000 feet. These wells, drilled in most cases with makeshift rigs and completed with second-hand equipment, are very cheap, the cost depending entirely on the operator and equipment used.

LOOKING UP!



Up through the steel meshes of this oil derrick—Look! What do you see?

From draw works to crown block, and back again, you see "Flex-Set" Preformed Yellow Strand.

You know that the cable on a rotary rig must be tough—must take it on the chin, and like it. In fact, you know that the only cable that will ever give genuinely economical service is the very best cable you can buy.

That is why oil producers are looking up—up toward higher and higher quality. And they are getting it in "Flex-Set" Preformed Yellow Strand.

Preforming the wires and strands of an already excellent cable has produced new properties that no one cable of standard type has ever possessed—limpness and flexibility without loss of strength, and remarkable resistance to kinking, drum crushing and fatigue.

Looking up through your rotary rig, and seeing "Flex-Set" Preformed Yellow Strand doing the heavy work, is proof positive that the economy of your operation is also looking up.

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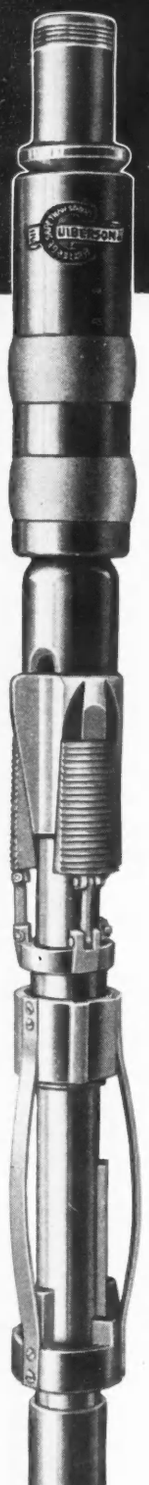
"Flex-Set" Preformed YELLOW STRAND

For Drilling in, Tubing and Packing HIGH-PRESSURE WELLS



New "Type G" Guiberson Control-Head Packer

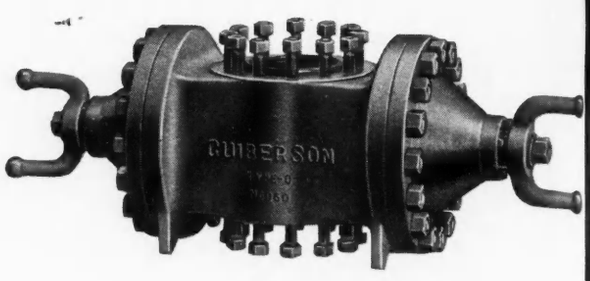
Type C-2 High-Pressure Tubing and Drill Pipe Oil Saver, for Working Pressures up to 600 Lbs.

DRILLING IN

The new GUIBERSON Type C-2 and Type D High Pressure Oil Savers were designed in answer to a definite DEMAND on the part of leading producers and contractors.

Both types are of one piece, all steel construction to withstand the high pressures sometimes encountered in drilling in wells under pressure. The Type C-2, having a through opening of 10", which will pass anything up to that diameter, is tested for 1200 lbs. hydrostatic pressure and is recommended for working pressures up to 600 lbs., while the Type D, having a through opening of $7\frac{1}{16}$", is tested for 3000 lbs. and recommended for 1500 lbs. working pressure.

Suitable adapters can be furnished with either type to fit in any kind of hook-up.



Type D High-Pressure Tubing and Drill Pipe Oil Saver, for Working Pressures up to 1,500 Lbs.

TUBING

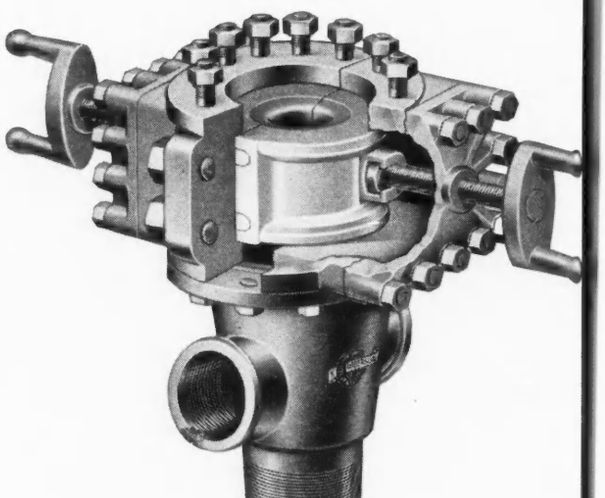
Types C-2 and D Oil Savers are ideal for tubing wells under pressure, as is the Type B Oil Saver, which has a split cast steel housing and is designed for working pressures up to 400 lbs., and has a through opening of 8".

All GUIBERSON Oil Saver Rubbers are of a durable oil-resisting compound, designed to allow passage of tubing and drill collars with no leakage.

PACKING

For setting tubing in flowing wells and packing off between tubing and casing, the GUIBERSON Oil Saver of the proper capacity and the GUIBERSON Control Head Packer are recognized by producers as unequalled. Our Type G Packer offers several important improvements. The new "Duprene" packing is unaffected by oil and gas, is more durable than rubber and will not stick to the casing wall. The two narrow rubbers in place of one wide one assure a tight pack-off under all conditions. Dovetail slip construction insures accurate alignment and operation.

For full details on oil savers and packers, see your supply house, ask for special bulletins or consult the Composite Catalog, pages 547 to 574.



Type B High-Pressure Tubing Oil Saver, for Working Pressures up to 400 Lbs.

THE GUIBERSON CORPORATION

Box 1106, Dallas, Texas

TULSA: 502 Wright Bldg.; HOUSTON: 2241 Herman Drive; WICHITA, KANSAS: 530 S. Fountain St.; NEWARK, OHIO: First & Locust Sts.; LOS ANGELES, CALIF: W. R. Guiberson Co., 723 E. Gage Ave.; NEW YORK: 30 Rockefeller Plaza.

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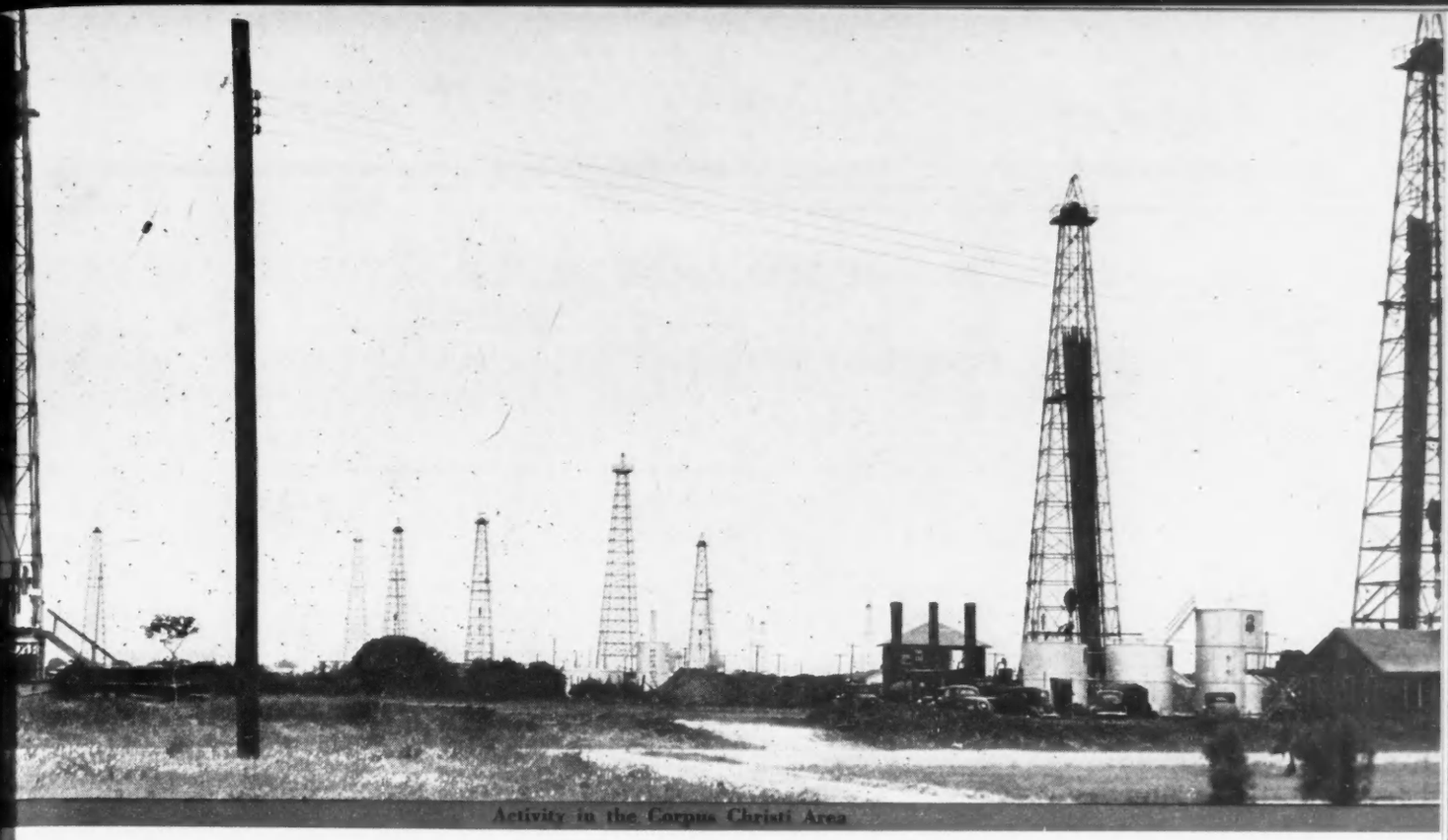

Activity in the Corpus Christi Area

South Texas Reserves Are Increasing Rapidly

KNOWN PRODUCIBLE CRUDE IN GROUND ESTIMATED AT 515,797,082 BARRELS

By EARL S. POST, Staff Writer

WITH 836,436,953 barrels of producible oil estimated discovered and only 37 percent of this volume recovered to date, plus the fact that new producing areas are being opened continuously, South Texas assumes an important position among the world's greater crude oil reserves. The real importance of the district, however, is not in the 515,797,082 barrels of future recoverable reserves estimated in sight today, but in the rapidity with which this figure is being enlarged.

According to a survey, which included checking with more than a dozen authoritative sources, during the first eight months of 1936 recoverable oil has been brought to light at the rate of approximately 605,000 barrels per day in South Texas, while withdrawals have amounted to less than 140,000 barrels daily. Thus the region's future recoverable known reserves gained 465,000 barrels per day during the period, which establishes it among the fastest increasing reserve areas in the world.

According to figures compiled by one company that has made a careful study of the region, production from South Texas fields during the first six months of the year totaled 25,319,000 barrels. During this period new properties were developed that had a total expected ultimate recovery of 110,259,000 barrels, a gain of 84,940,000 barrels in reserves over withdrawals, or an increase of approximately 14,157,000 barrels per month.

It is estimated that 836,436,943 barrels of oil will be recovered ultimately from present proved territories. There had been 320,639,871 barrels of oil recovered up to July 1, 1936, leaving a future producible reserve of 515,797,082 barrels, or 63 percent still in the ground.

Figures compiled by THE OIL WEEKLY from various

Indicated Crude Oil Reserves in South Texas

FIELD AND COUNTY	Age in Months	Acres in Oil	Total Oil Wells	Expected Recovery, Barrels	Recovered to July 1, 1936, Barrels	Expected Recovery Per Acre	Per Acre Recovery to July 1, 1936	Per Well Recovery, July 1, 1936	Reserve Still in Ground	Is Field Defined
Agua Dulce—Nueces	67	480	17	2,400,000	207,612	5,000	422	12,212	2,232,388	No
Albercas—Webb	110	246	88	2,880,000	2,425,413	11,745	9,892	27,550	454,587	Yes
Alta Verde—Brooks	4	120	2	210,000	2,100	1,750	17	1,050	207,900	No
Alta Vista—Bexar	288	120	58	120,000	103,335	1,000	861	1,781	16,665	Yes
Alworth—Jim Hogg	118	80	8	26,977	26,977	337	337	3,372	.....	Yes
Angelita—San Patricio	27	10	1	31,103	31,103	3,110	3,110	31,103	.....	Yes
Aviators—Webb	169	960	197	6,528,000	5,462,492	6,800	5,690	27,723	1,065,508	Yes
Baldwin—Nueces	12	240	7	1,920,000	222,021	8,000	925	31,743	1,697,979	No
Barbacoas—Starr	26	20	2	70,000	21,071	3,500	1,053	10,535	48,929	No
Bentonville—King-Jim Wells	2	30	3	246,000	11,000	8,200	366	3,666	243,000	No
Brayman—Caldwell	64	120	9	216,000	88,412	1,800	736	9,824	127,588	No
Buchanan—Caldwell	85	150	8	262,500	173,694	1,750	1,157	21,712	88,806	No
Byersville—Williamson	33	230	47	1,058,000	315,511	4,600	1,502	6,734	742,489	Yes
Caesar—Bee	25	340	31	2,975,000	480,641	8,750	1,413	15,504	2,469,359	No
Calliham—McMullen	211	320	69	880,000	551,293	2,750	1,723	17,995	328,707	No
Carolina—Texas-Webb	120	110	15	275,000	247,855	2,500	4,253	16,523	27,145	No
Charco Redondo—Zapata	266	350	3,222	175,000	141,775	500	413	44	33,226	Yes
Carroll—Bastrop	46	80	2	96,000	29,813	1,200	372	14,906	65,187	No
*Cedar Creek—Bastrop	37	170	17	548,000	183,418	3,200	1,079	10,789	364,582	Yes
Chicon Lake—Medina	85	250	23	75,000	18,950	300	76	824	56,050	Yes
Chapman—Williamson	77	350	128	4,620,000	4,093,951	13,200	11,696	31,984	526,049	Yes
Clara Driscoll—Nueces	7	20	1	200,000	32,223	10,000	1,611	32,223	167,777	No
Cole—Webb-Duval	113	2,150	219	18,812,500	2,822,718	8,750	1,314	12,902	15,986,782	No
Coleto Creek—Victoria	36	280	23	2,296,000	353,475	8,200	1,262	15,368	1,942,525	Yes
Comitas—Zapata	23	420	34	1,785,000	38,679	4,250	92	1,137	1,745,321	No
Cooksey—Bexar	69	65	14	104,000	68,751	1,600	1,056	4,910	35,749	Yes
Crowther—McMullen	300	125	20	25,000	25,000	200	200	1,250	.....	Depleted
Cuellar—Zapata	111	340	77	2,699,000	2,426,586	7,935	7,137	31,514	272,414	Yes
Cuevitas—Starr	36	450	10	2,452,500	303,878	5,450	675	30,387	2,146,122	Yes
Dale—Caldwell	108	230	48	1,725,000	1,110,372	7,500	4,827	23,132	604,628	No
Darst Creek—Guadalupe	84	1,725	286	69,000,000	37,948,719	39,420	21,999	13,268	31,051,281	Yes
Dirks—Bee	19	820	104	8,077,000	1,540,780	9,850	1,879	14,811	6,609,220	Yes
Driscoll—Duval	69	180	9	1,080,000	467,520	6,000	2,597	51,946	612,840	No
Dunlap—Caldwell	61	60	8	360,000	254,228	6,000	4,244	31,816	105,472	Yes
Eckert—Bexar	94	860	135	1,462,000	657,239	1,700	764	4,868	804,761	Yes
Eagle Hill—Duval	33	340	20	1,258,000	440,505	3,700	1,295	22,025	810,495	No
Escobas—Zapata	86	1,840	308	12,604,000	5,881,856	6,850	3,191	19,096	6,722,144	No
Fort Merrill—Live Oak	11	30	2	90,000	21,698	3,000	723	10,849	68,303	No
Gas Ridge—Bexar	200	80	18	74,400	57,801	930	722	3,211	16,599	Yes
Government Wells—Duval	94	7,280	744	71,344,000	25,548,061	9,800	3,509	97,236	46,427,939	Yes
Grayburg—Bee	72	50	3	20,000	13,999	400	258	4,666	6,001	Yes
Greta—Refugio	37	4,420	217	75,140,000	12,858,447	17,000	2,909	59,250	6,228,553	No
Henne Winch—Farris-Jim Hogg	144	720	147	3,222,000	3,203,282	4,475	4,449	21,797	18,718	Yes
Heyser—Calhoun	3	20	1	400,000	5,160	20,000	258	5,160	394,840	No
Hilbig—Bastrop	41	260	14	2,210,000	946,107	8,500	3,637	67,578	1,263,107	Yes
Hoffman—Duval	24	350	24	2,747,500	77,319	7,850	221	3,221	2,669,181	No
Hords Creek—Goliad	78	40	2	180,000	14,371	4,500	359	7,185	162,629	No
†Ina—Medina	151	370	37	185,000	175,082	500	4,473	4,732	9,918	Yes
Jacob—McMullen	50	1,400	82	3,010,000	638,353	2,120	456	7,784	2,371,647	Yes
Keenan—Victoria	53	200	5	2,000,000	404,681	20,000	2,023	80,936	1,395,319	No
Kingsville—Kleberg	190	200	18	700,000	649,052	3,500	3,445	36,058	50,948	Yes
Kohler—Duval	111	240	18	672,000	483,505	2,800	3,473	26,861	188,495	Yes
Larrimore—Caldwell	97	80	14	304,000	221,538	3,800	2,769	15,824	82,462	Yes
Laurel—Webb	48	260	32	780,000	593,743	2,885	2,282	18,554	185,257	Yes
Leaseholders—Webb	190	10	2	25,000	25,000	2,500	2,500	12,500	.....	Depleted
Loma Alta—McMullen	14	20	2	120,000	25,775	6,000	1,288	12,887	94,225	No
Loma Novia—Duval	18	6,500	538	60,710,000	2,938,964	9,340	434	5,462	57,771,036	No
Loma Vista—Duval	4	10	1	45,000	4,076	4,500	407	4,576	40,924	No
Lone Oak—Bexar	21	20	2	15,000	2,086	750	104	1,043	12,932	No
Lopez—Webb-Duval	12	1,850	126	13,390,000	547,452	7,345	295	4,344	12,842,548	No
Los Olmos—Starr	132	175	76	700,000	449,881	4,000	2,570	5,919	250,119	No

Lone Oak—Bexar	21	20	2	15,000	2,086	750	104	1,043	12,932	No
Lopez—Webb-Duval	12	1,850	126	13,390,000	547,452	7,345	295	4,344	12,842,548	No
Los Olmos—Starr	132	175	76	700,000	449,881	4,000	2,570	5,919	250,119	Yes
Lucas, Mt.—Live Oak	64	320	12	1,160,000	200,822	3,625	627	16,735	959,178	Yes
Luling—Caldwell	167	2,160	594	72,360,000	64,180,328	33,500	12,121	222,077	8,179,672	Yes
Lytton Springs—Caldwell	139	1,380	289	8,280,000	7,360,797	6,000	5,333	25,469	919,203	Yes
McFadden—Victoria	54	30	2	165,000	92,520	5,500	3,084	46,260	72,480	No
McNeil—Live Oak	24	70	7	472,500	142,267	6,750	2,032	20,323	330,233	No
Manda—Travis	22	40	5	80,000	15,307	2,000	382	3,061	64,693	Yes
Manford—Guadalupe	80	40	4	460,000	366,033	11,500	9,151	91,508	93,967	Yes
Mauritz—Jackson	13	20	1	220,000	26,750	11,000	1,337	26,750	193,250	No
Mercedes—Hidalgo	16	1,000	5	1,500,000	56,909	1,500	57	11,582	1,443,091	No
Minerva—Rockdale-Milam	184	4,250	617	3,612,500	3,251,081	850	764	5,268	361,419	Yes
Mirando City—Webb	177	1,405	277	8,992,000	8,529,600	6,400	5,359	30,792	462,400	Yes
Mirando Valley—Zapata	184	140	30	665,000	628,994	4,750	4,491	20,966	36,006	Yes
Mission—Bexar	360	120	32	65,890	65,890	549	549	2,060	.....	Depleted
Moca—Webb	44	80	9	880,000	519,100	11,000	6,488	57,677	360,900	Yes
Normanna—Bee	72	40	4	62,000	47,720	1,550	1,193	11,930	14,280	Yes
North Dale—Bastrop	46	320	17	782,000	403,939	2,450	126	23,732	379,861	Yes
North Lucas—Live Oak	15	120	2	600,000	49,485	5,000	412	23,761	550,515	No
North Pettus—Karnes-Bee-Goliad	72	720	66	6,624,000	1,550,493	9,200	2,153	23,492	5,073,507	No
O'Connor—Refugio	55	140	5	1,260,000	295,349	9,000	2,108	59,070	964,651	Yes
Ottine—Gonzales	90	10	1	24,635	24,635	2,463	2,463	24,635	.....	Depleted
Pearsall—Frio	19	2,000	15	22,500,000	184,746	11,250	92	12,316	22,315,254	No
Palangana—Duval	97	15	4	3,635	3,635	242	242	909	.....	Depleted
Peters—Duval	26	40	4	280,000	8,500	7,000	212	2,122	271,500	No
¶Pettus—Bee	79	752	78	9,815,000	7,775,912	13,000	10,206	99,691	2,039,088	Yes
Piedra Lumbre—Duval	10	240	19	2,208,000	82,910	9,200	344	4,364	2,115,090	No
Peidra Pintas—Duval	372	120	25	150,000	142,615	1,250	1,188	5,705	7,385	.....
Placedo—Victoria	15	1,450	66	20,300,000	618,108	14,000	1,445	9,365	19,681,892	No
Plymouth—San Patricio	15	2,120	85	35,140,000	2,093,491	16,575	987	24,629	33,046,509	No
Port Lavaca—Calhoun	33	250	11	2,125,000	265,280	8,500	1,061	193,182	1,859,720	Yes
Premont—Jim Wells	38	30	4	7,803	7,803	260	260	1,951	.....	Yes
Randado—Jim Hogg	122	765	176	4,743,000	4,303,257	6,200	5,626	24,450	439,743	Yes
Ray—Bee	15	480	42	3,840,000	618,925	8,000	1,289	14,736	3,221,075	Yes
Refugio—Refugio	107	3,165	332	42,727,500	32,010,552	13,500	10,113	96,417	10,716,448	Yes
Reiser—Webb	310	20	3	4,000	4,000	200	200	1,333	.....	Yes
Rio Grande City—Starr	49	140	26	560,000	188,803	4,000	1,348	7,250	371,197	No
Roma—Starr	106	20	1	20,000	8,970	1,000	448	8,970	11,030	No
Rutledge—Bee	14	15	2	67,500	11,902	4,500	974	5,951	55,598	Yes
S. R. C.—Duval	70	90	7	288,000	204,423	3,200	2,271	29,203	83,577	Yes
Salt Flats—Caldwell	98	1,050	341	39,375,000	34,505,094	37,500	481	101,188	4,869,906	Yes
Sal-Mar—Guadalupe	49	10	1	10,750	10,250	1,075	1,075	10,750	.....	Depleted
Samfordyce—Hidalgo	22	920	153	11,960,000	2,284,369	13,000	2,483	14,930	9,575,631	No
Sarmosa—Duval	50	590	44	3,776,000	1,376,491	6,400	2,333	31,284	2,399,509	Yes
Saxet—Nueces	72	2,260	173	20,001,000	4,913,678	8,800	2,174	28,400	15,087,322	No
Saxet Heights—Nueces	8	750	111	4,800,000	713,408	7,200	951	6,427	4,086,592	Yes
Schimmel—Bastrop	61	30	3	15,000	6,133	500	204	2,044	8,867	Yes
Seven Sisters—Duval	14	2,630	221	27,615,000	784,287	10,500	298	2,556	26,830,715	No
Sinton—San Patricio	26	120	6	600,000	51,361	5,000	428	8,660	548,639	No
Slick—Goliad	76	10	1	69,270	69,270	6,927	6,927	69,270	.....	Depleted
Somerset—Bexar	306	11,390	1,180	12,250,000	10,303,158	1,057	904	8,706	1,946,842	Yes
South Darst Creek—Guadalupe	11	40	8	200,000	87,823	5,000	2,185	12,228	112,117	No
Staples—Guadalupe	10	20	3	8,000	1,725	400	86	575	6,275	Yes
Taft—San Patricio	7	240	10	3,600,000	57,044	15,000	238	5,704	3,542,956	No
Thrall—Williamson	196	475	192	2,256,250	2,167,001	4,750	4,652	11,286	82,249	Yes
Tomoconnor—Refugio	24	1,620	49	56,700,000	1,175,358	35,000	725	23,987	55,224,642	No
Tuleta—Bee	48	90	10	145,000	133,374	1,611	1,418	13,337	11,626	Yes
Vanderbilt—Jackson	26	10	1	90,000	79,075	9,000	7,907	79,075	10,925	Yes
Van Ormy—Bexar	61	825	56	371,250	35,297	450	42	630	335,953	No
West Cole—Webb	110	420	87	3,990,000	3,192,491	9,500	7,601	36,695	797,509	Yes
West Tuleta—Bee	25	920	89	6,210,000	1,050,657	6,750	1,142	11,793	5,149,343	Yes
White Point—San Patricio	67	40	3	77,990	27,990	1,949	3,899	25,663	.....	No
Voss—Bee	1	10	1	80,000	2,610	8,000	261	2,610	77,390	No
Yost—Bastrop	91	150	25	1,110,000	868,717	7,400	5,791	34,748	231,283	Yes
Yturria-Southton—Bexar	150	850	120	680,000	549,547	800	644	4,579	130,453	Yes
Zoboroski—Guadalupe	60	95	6	237,500	9,803	2,500	105	1,634	227,697	No

* North and South field included. † Includes Taylor field. ¶ Includes discovery, townsite, Southwest and Cosden pools.

authoritative sources show that South Texas has 176 oil and gas fields, of which 132 are producing oil. In these oil fields, 88,921 acres have been proved productive by 10,177 successful completions, or an average of one well to each 8.73 acres. This figure does not include hundreds of gas wells that have developed nearly 100,000 acres of gas reserves in the territory.

The area classified as South Texas in this article is about the size of the State of Oklahoma. The eastern boundary of Jackson County forms the southeast corner of the region. From this point the boundaries of the territory extend south and west along the Gulf of Mexico to the Mexican border, thence north and west up the Rio Grande River to the western edge of Val Verde County. The northwest edge of Crockett County is the northwestern corner post, from which it extends due east to the northeastern corner of Milam County. The eastern boundary is formed by the tier of counties lying between Milam and Jackson Counties.

Much Drilling

The rapid expansion of reserves in South Texas has been due to an abundance of exploratory drilling. The region is one of the most active in the United States. Drilling operations have been featured by numerous wildcat producing completions. Hardly a week goes by that another producing area is not discovered, although the majority are small as compared with Rodessa, Anahuac and other large discoveries in other regions, when combined the reserve total looms huge. A slight slackening of work was evidenced late in the summer, but new fields with their necessary offsetting campaigns undoubtedly will cause a pick up shortly. Meanwhile, wildcatting continues unabated and numerous new fields and extensions are being discovered, which ultimately will be explored; thus increasing the reserve figure further.

Recent Discoveries

The greater portion of the 515,797,082 barrels of recoverable oil estimated still in the ground is in sectors discovered within the past two years, and much of this volume will be produced under flush flowing conditions. Except for Refugio in the Trans-Salt Dome region, a few older fields in the Mirando district, Pettus and the upper Balcones Fault zone, South Texas is virtually a brand new thing, as will be noted from the accompanying table of comparisons of various producing formations.

The big play at this time centers around Tertiary production, nearly 90 percent of the drilling being directed to producing levels in this geologic horizon. This group is divided into several districts. The Miocene-Oligocene production is in the immediate coast trend from Wharton County on the east through Corpus Christi to the Mexican border in the Rio Grande Valley. The Jackson trend follows the same line, about 60 to 80 miles farther inland, and is made up of Whitsett, Hockleyensis, Cockfield, Yegua, Cook Mountain and Mount Selman formation production.

To date there have been 34 fields discovered along the Corpus Christi trend, developing 20,565 acres from 1420 oil producers. Production in this trend ranges from shallow depths to 7500 feet, the greater amount of the development being between 4000 and 6000 feet. Due to wide spacing of wells (10 to 20 acres) and excellent recoveries, considerable profit is being realized from these operations. Likewise, the wells in most cases contain excellent quantities of gas, reducing lifting costs. A break down of all drilling along this trend shows an average expected ultimate recovery of 14,010 barrels per acre with the average spacing per well calculated at 14.48 acres. While these figures appear unusually enthusiastic, it must be taken into consideration that they are made up of a number of poor producing areas and several of unusually high potentialities. Also, some of the controlled areas are able to space wells on units as large as 25 acres, while in several fields, drilling on town lots has attracted offsets 50 feet apart.

Geophysical and geological work, coupled with a tremendous amount of wildcatting and successful operations should see the picture greatly changed along this trend within the next year with new fields adding many millions of barrels of new reserves.

Jackson Trend Interest

From a present play standpoint, the Jackson trend is attracting about as much attention as the area just discussed. The drilling, however, is much shallower, being mainly limited to wells from 2000 to 4000 feet in depth, the majority being above 3000 feet. This particular region is divided into two groups, namely the Pettus and Mirando areas. The latter is finding highly prolific fields in the upper phases of the Jackson mainly around 2200-2800 feet. In fact, the greater part of the ultimate recovery of 301,172,247 barrels expected from already proved areas in this district will come from Duval County. Sands locally known as the Chernoskey, Government Wells Loma Novia and Mirando are providing scores of new producers each month. The Pettus sector has production at 3600 to 4300 feet in the Cockfield and upper Yegua. It is high gravity, while the upper Jackson oil of the Mirando district is low gravity. There is an overlapping of formations, and production is found through the whole trend in various sands.

Spacing

The Jackson trend has been comparatively well handled from a drilling standpoint, the majority of the fields being on a 10-acre spacing. In the 57 fields along this trend, 4380 wells have been drilled on 37,881 acres or an average of the one well to 8.52 acres. This dis-

Recovery Comparison of Various South Texas Producing Formations

PRODUCING ZONE	PRODUCTION DATA AS OF JULY 1, 1936							ESTIMATED FUTURE YIELD†		
	Number Oil Fields	Productive Oil Acres	Completed Oil Wells	Acres per Well	Recovery per Acre	Recovery per Well	Cumulative Recovery	Total Ultimate	Ultimate per Acre	Remaining Reserve
Miocene–Oligocene	34	20,565	1,420	14.48	2,930	42,430	60,250,309	288,151,031	14,010	227,900,722
Jackson–Yegua	57	37,881	4,380	8.52	2,345	68,760	88,861,661	301,172,247	7,950	212,310,786
Navarro–Taylor*	16	19,210	2,293	8.41	797	6,677	15,312,852	19,039,675	991	3,726,574
Serpentine	12	3,715	787	4.72	4,814	22,721	17,881,856	22,780,250	6,132	4,898,394
Austin Chalk and Edwards Lime	13	7,550	1,297	5.83	17,256	106,656	138,333,193	205,293,750	26,489	66,960,557
Totals	132	88,921	10,177	8.73	3,605	31,516	320,639,871	836,436,953	9,406	515,797,082

* Pearsall field shown in Austin Chalk–Edwards Lime group only.

† Based upon present proved areas only.

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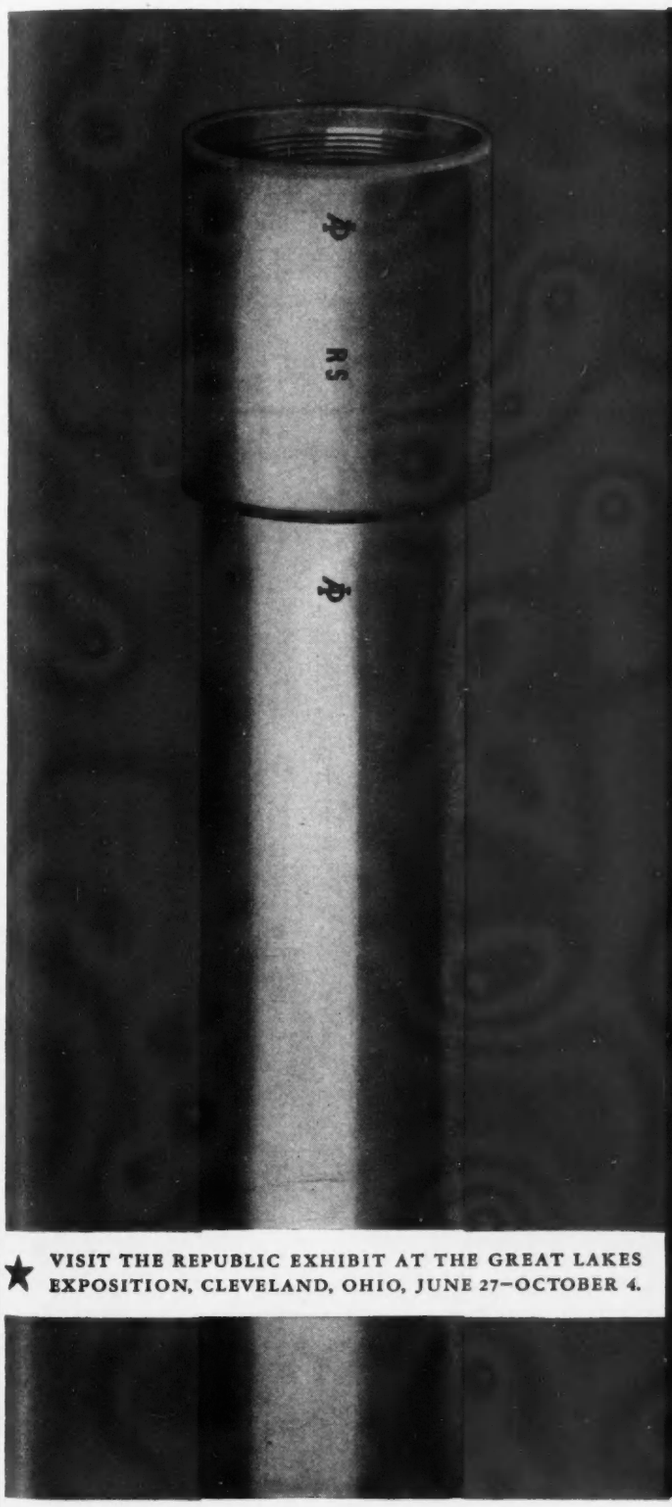

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trict has recovered 88,861,601 barrels of oil or about 30 percent of the ultimated expected recovery, leaving a reserve of 212,310,786 barrels.

The other district of South Texas is the Balcones Fault zone made up of shallow Navarro-Taylor sand and shales, Serpentine and the Austin Chalk-Edwards limestone group.

The Edwards limestone production is the most prolific of all horizons in South Texas, although its producing area has been limited to Caldwell and Guadalupe Counties in three major fields and a couple of minor areas. This formation has an average expected ultimate in the three major fields of considerably in excess of 35,000 barrels per acre. The general average, including the limestones and chalks from the Austin Chalk to the Edwards lime, inclusive, is the highest for the South Texas district, being 26,489 barrels per acre. This includes 1297 oil wells on 7550 acres or an average of 5.82 acres per well. The total ultimate recovery from the above acreage is figured at 205,293,750 barrels with 138,333,193 having been recovered, leaving hardly more than one-third of the crude yet to be recovered.

Serpentine Production

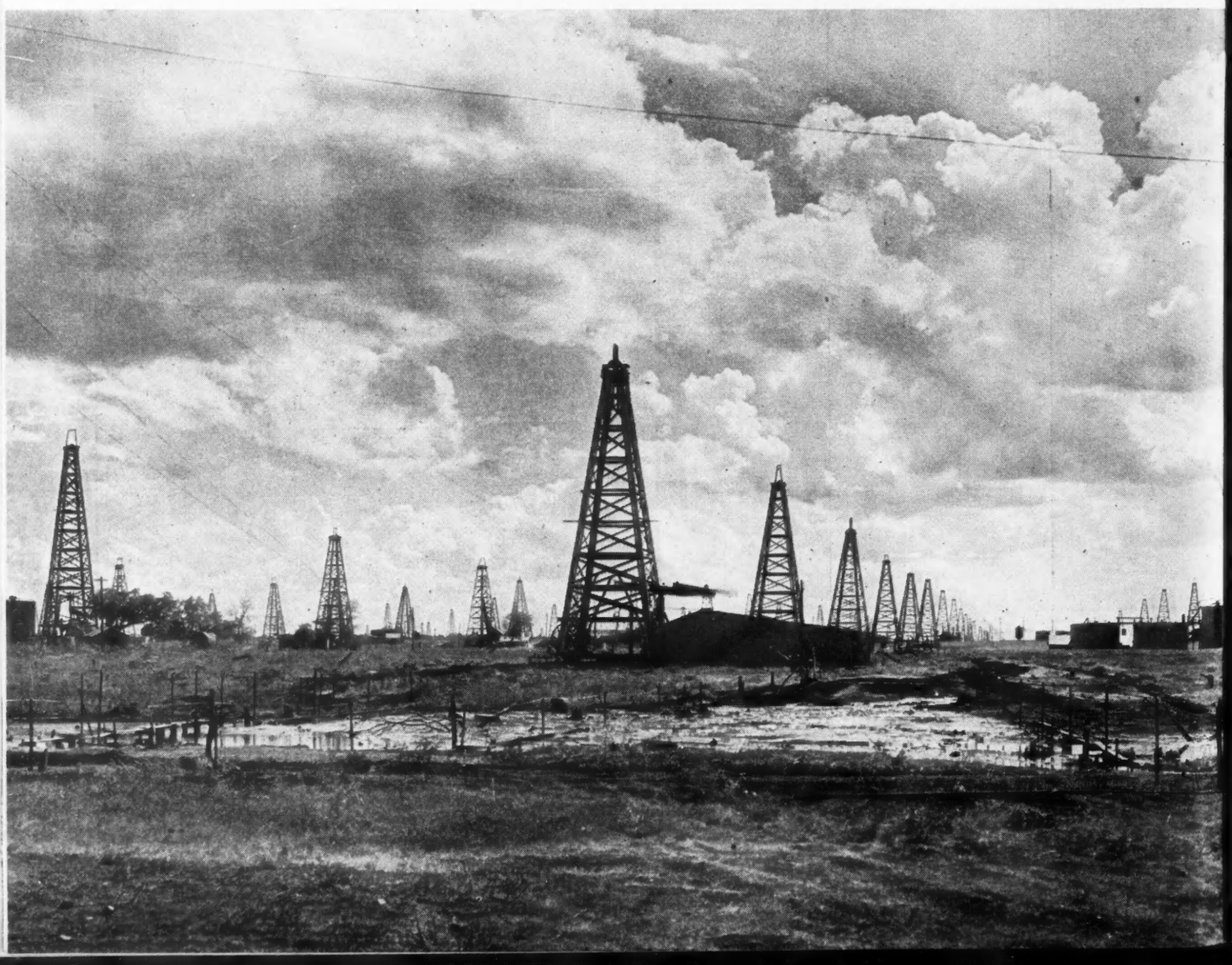
Serpentine production, mainly in Williamson, Travis, Bastrop and northern Caldwell Counties, is found in 12 fields and has 787 wells on 3715 acres. This shallow play, generally around 2000 feet, is rather profitable, averaging 6132 barrels per acre ultimate recovery. Wells are closely spaced on this type of development, the average being 4.72 acres per well.

Navarro and Taylor sands and shales, ranging from 500 to 1000 feet, and in a few places deeper, provide poor recovery, the average being 991 barrels per acre from 19,210 acres developed with 2293 wells. The average spacing is 8.41 acres per well. While the recovery is very low, wells can be cheaply drilled.

Types of Crude

Types of crude are of unusual interest in discussing reserves. The Jackson and Corpus Christi provide oils ranging from 20 gravity up to clear gasoline. The low-gravity crudes contain an excellent anti-knock quality for gasoline if cracked. Also it is a good stock for lubricating and Diesel oil. The higher gravity crudes can provide large ratio of gasoline when run through a skimming plant. Due to the variety and excellence of qualities, these oils are in great demand by domestic and export markets. The oils along the Balcones fault zone are handled through established trunk pipe line systems and find a ready market. Much of the crude is used locally for refining. Although it has a rather heavy sulphur content, it is a good gasoline and fuel oil stock.

Scene in the Luling field of Caldwell and Guadalupe Counties. This field has had more recovery than any other in South Texas and is expected to yield more than eight million barrels.



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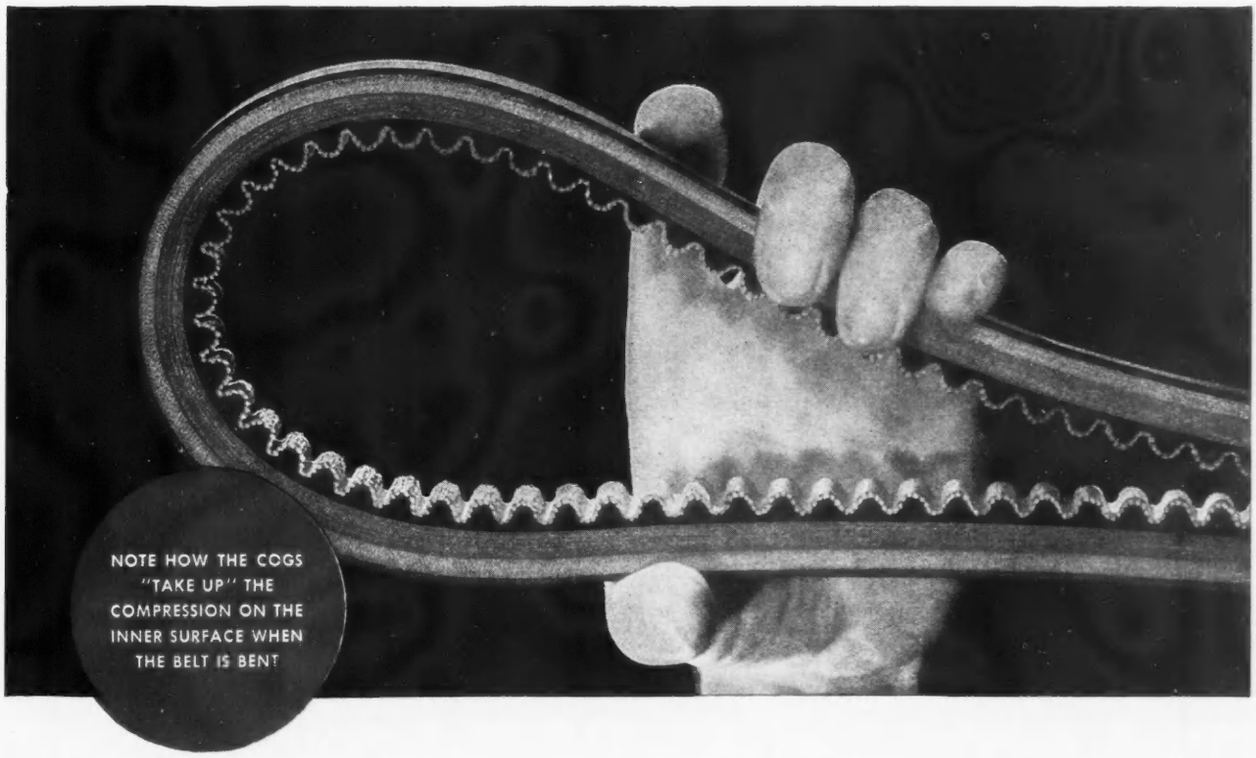

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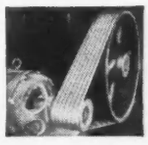

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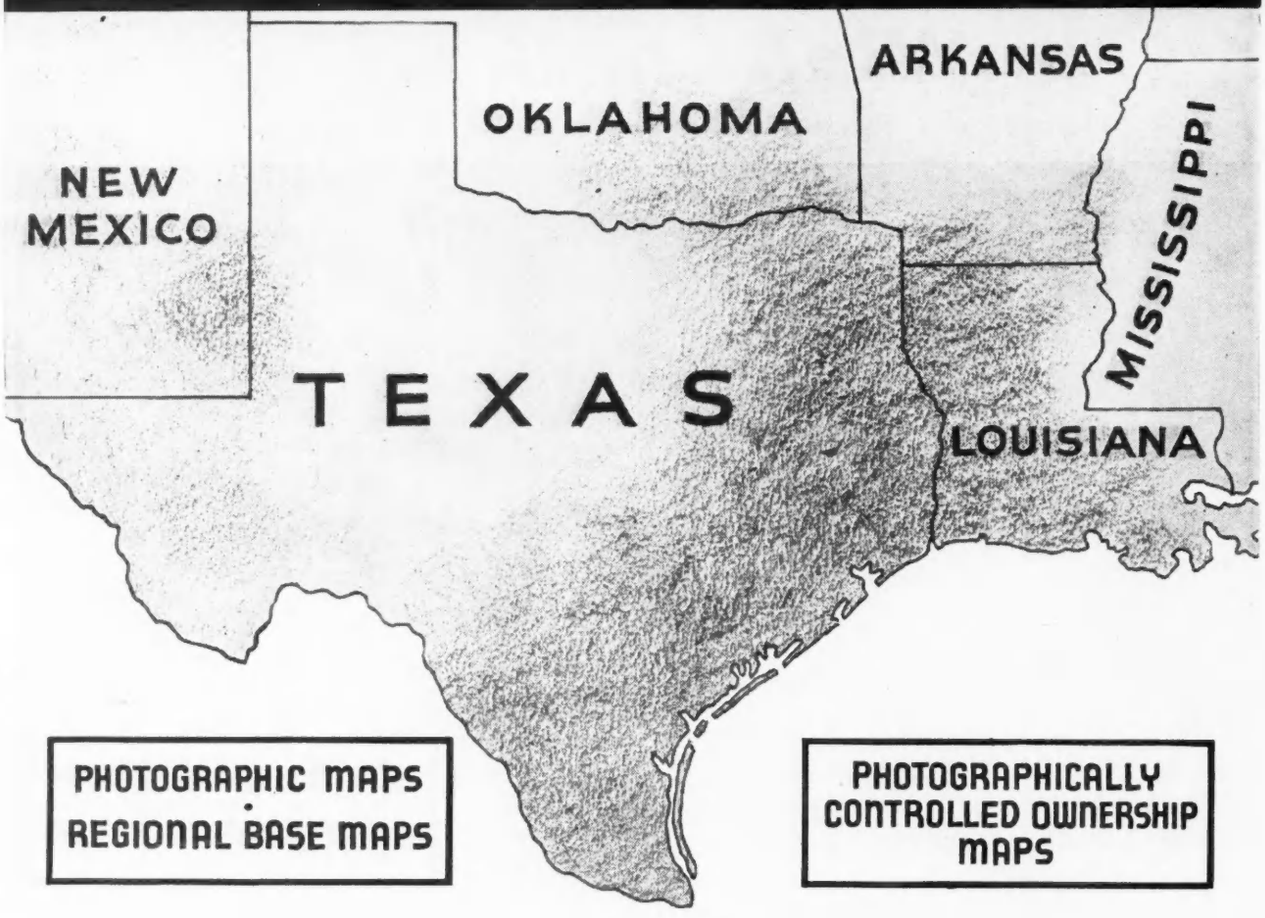

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NUMEROUS TYPES OF STRUCTURES, MULTIPLE SANDS AND DEEP PRODUCING POSSIBILITIES

Outstanding Features Of South Texas Geology

By GEORGE R. PINKLEY,
Geologist, San Antonio, Texas

SOUTH TEXAS, a region composed of nearly 42,000,000 acres, and one of the oldest producing areas in the United States, is still in its infancy from a development standpoint. Tremendous potential possibilities at depths varying from near the surface to many thousand feet remain to be explored.

The true picture of South Texas can only be appreciated by a thorough study of the types of structures, productive zones and extent of present development. Along this line, some 800,000,000 barrels of recoverable oil has been uncovered in formations ranging from Ordovician in the Hill Country to latest Tertiary on the Gulf Coast.

A cross section of the above area will indicate a sedimentary deposit of tremendous thickness, greatly increasing in a coastwise direction. Wells to 15,000 feet, and possibly 20,000 feet, may be expected in the future in portions of the South Texas district.

The great importance of this trend to deeper drilling will be development of lower horizon reserves on present producing or known structures. The fact that virtually every known geological zone is producing in some portion of South Texas indicates that they will probably produce underlying each other in these known areas. This already has been more or less proved definitely by a number of multiple sand fields in the territory.

From a geological viewpoint, South Texas represents an almost complete picture of every type of structure and geological condition. From the Llano uplift to the coast, structural metamorphic and sedimentary problems abound. All types of rocks, fossils and features of almost picture book type are available for study in every part of the province. Compared with other parts of the Mid-Continent where oil activity has stimulated geologic research, however, the field problems of this area have been more difficult and the finding of commercial production

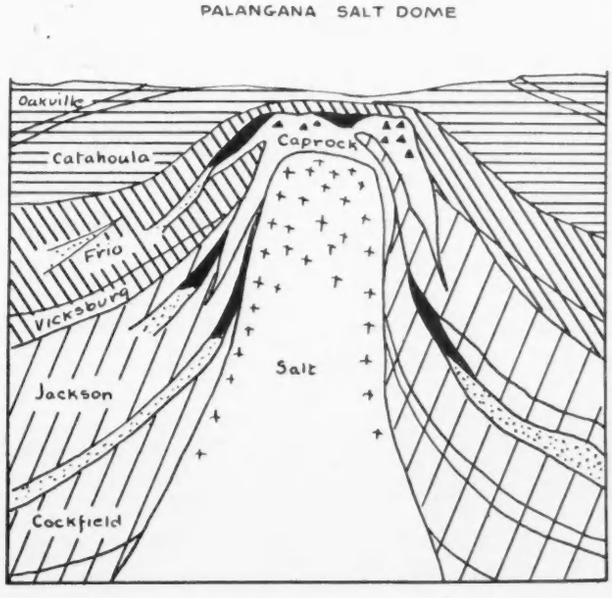


FIGURE 1

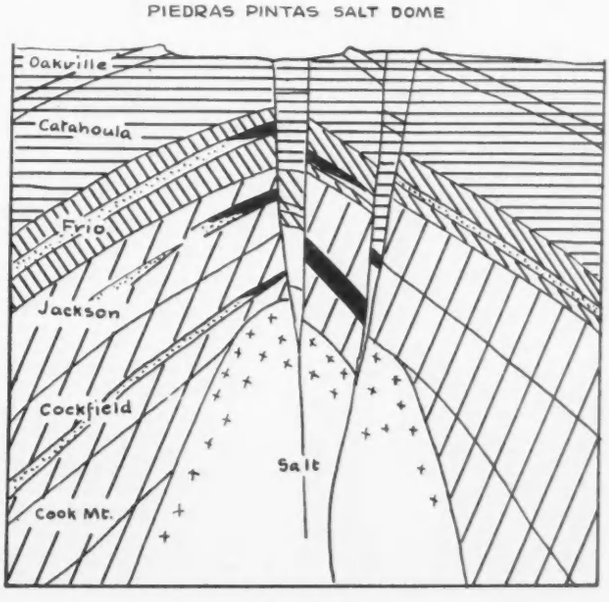


FIGURE 2

Showing types of salt domes found in South Texas territory

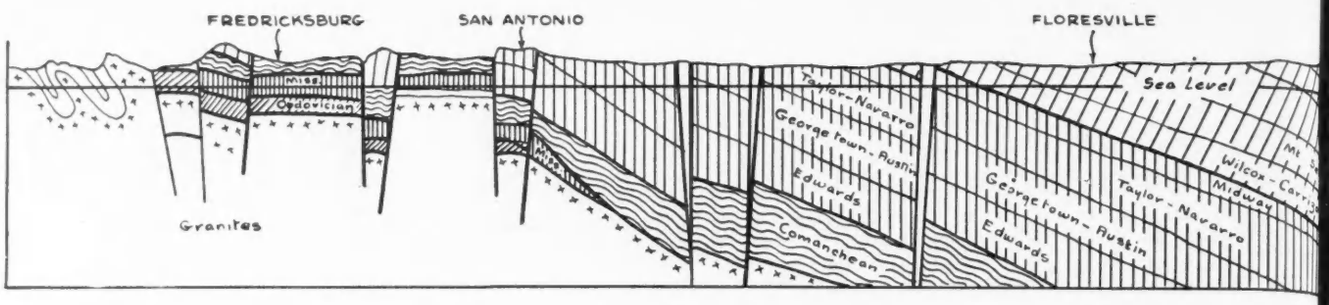


FIGURE 3. Cross section from Llano Mineral Uplift to Corpus Chris[illegible]owing

due less to the scientific study alone than has been the case in North Texas, Oklahoma and Kansas.

South Texas surface formations are in the main of softer, less consolidated types, the area less settled and covered with thicker growths of underbrush. As a result, field work in general has been less satisfactory than in the northern area. Careful work in the past few years has brought new understanding of the surface conditions, while widespread drilling of a more scientific nature has enabled the geologist to work out a true pattern of conditions governing oil accumulation over the 60 counties of this district.

In view of the numerous types of production found in this, it is necessary to discuss each in some detail to present its geological peculiarities.

Serpentine Production

The northernmost oil fields of this region consist of a number of small pools, in which the production is controlled by porosity on the tops of buried serpentine plugs. These plugs are found in the lower Taylor and upper Austin formations, and probably represent outpouring of lava on the sea floor over a fairly long period of time. They range from a few hundred feet to two miles in width. The Thrall field, one of the oldest and largest of this type covers an area of 475 acres, and to date has produced 2,169,225 barrels.

The plugs, due to their different composition from the country rock, can be readily found by magnetometer survey and several fields already have been found in recent years by the method. The larger fields, due to differential settling of the overlying formations and possibly to later uplift, are expressed to some extent by surface structure. Some plugs have been found in which no porosity was present, though not all have been condemned, as one part of a plug might be porous while another part is very tight.

The same type of structure persists to the southwest of the north producing area as far as Uvalde, where there are several plugs that have been covered through erosion. In Atascosa County, one well has been drilled recently which showed the presence of oil in a large plug, but the porosity found was not considered enough to make a commercial producer. It is very probable that additional pools of this type will be found.

Balcones Area

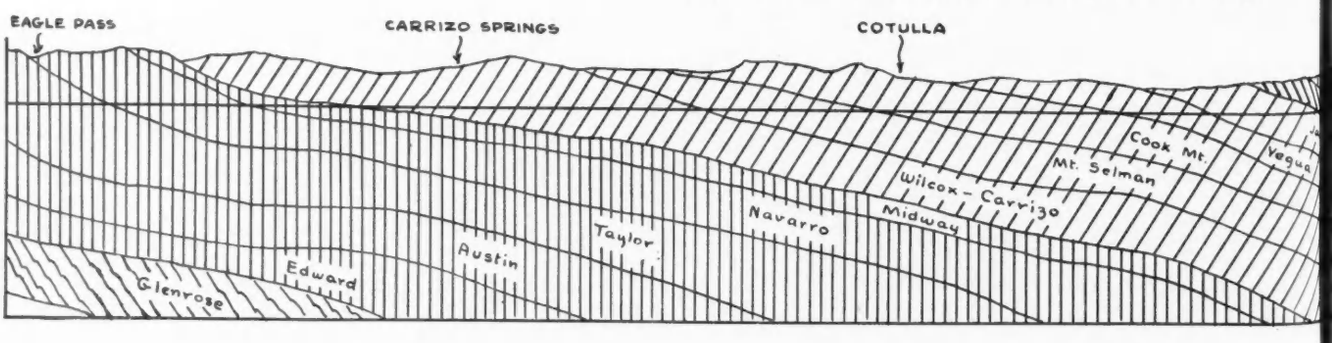
The next province includes the important Luling Salt Flats and Darst Creek pools, and a number of smaller areas. The general relationship of production to structure are shown on an accompanying cross section.

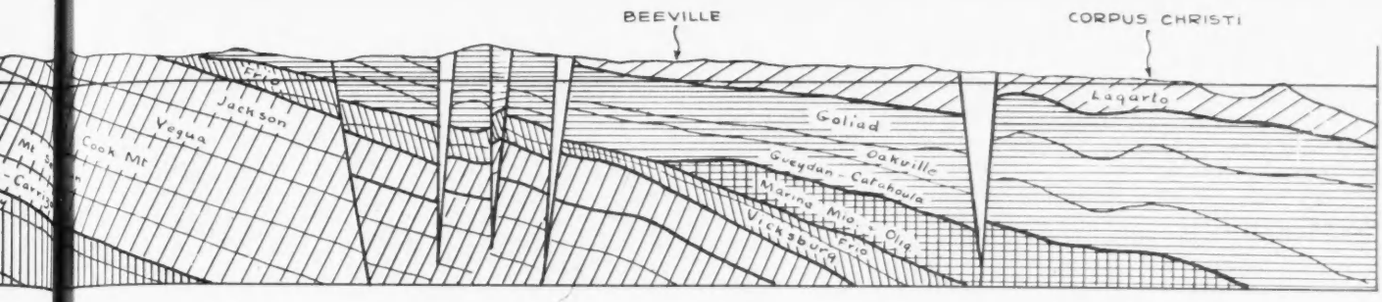
To date the only important production has been from the above-mentioned fields, which geologically speaking are major structures, being areas of 200 to 250 feet of closure against major strike faults of 350 to 500 feet displacement. This appears to be a proved requisite for Edwards lime production as numerous smaller closures have been tested with negative results.

Numerous small producing areas have been found in the Austin chalk horizon, where the accumulation is both in crevices along the faults and in porous zones in the chalk. Some of these, such as the Dunlap area, are quite separate from Edwards production, while others, such as South Darst Creek, Manford, Zoboroski, and small areas in the Edwards field, are merely accumulations that have migrated up the fault plane into shallower beds.

Acidation has been found very beneficial in this type of production, frequently the porosity is not continuous enough to assure that every well will penetrate a large drainage area. At present there is an active campaign to test areas where old wells reported showings in the chalk, before the days of acid treatment.

FIGURE 4. General cross section from Eagle Pass to Corpus Chris[illegible]owing





owing manner in which the formations of this area were laid down

Except where large crevices are present, the production from the chalk is not large, but the shallow depth and the fact that it is quite long lived makes it attractive.

While several deep tests have been made on the Luling and Darst Creek pools, it cannot be said that the area is condemned for production from the underlying Glenrose and Trinity formations. In view of the prolific production found in the Rodessa pool and other Glenrose and Trinity areas it seems advisable that additional tests be made on these three structures with careful coring and electric surveys.

The entire stretch of the country from Burleson County on the north to Atascosa County on the south, offers possibilities from both the Austin chalk and Edwards limestones, as well as the deeper zone.

Shallow Sands

Southwest of the prolific pools of the above group, lies Bexar County with a number of shallow fields, which have been producing for many years. Some 1500 wells, covering 16,000 acres have yielded 13,000,000 barrels of oil from the Taylor and Navarro formations. Over most of the area the Austin shows some heavy oil, but little commercial production has been developed to date. The Edwards limestone is a fresh water bearing zone in most of this area.

Over the south part of Bexar and the adjoining counties are several large structures, which while tested, have not been condemned for Austin and Edwards production, and almost everyone of the few wells drilled to the Glenrose and Trinity have had showings of oil.

It is to be expected that some day this area will yield commercial production in the lower formations, and when it does the fields found should be of major importance.

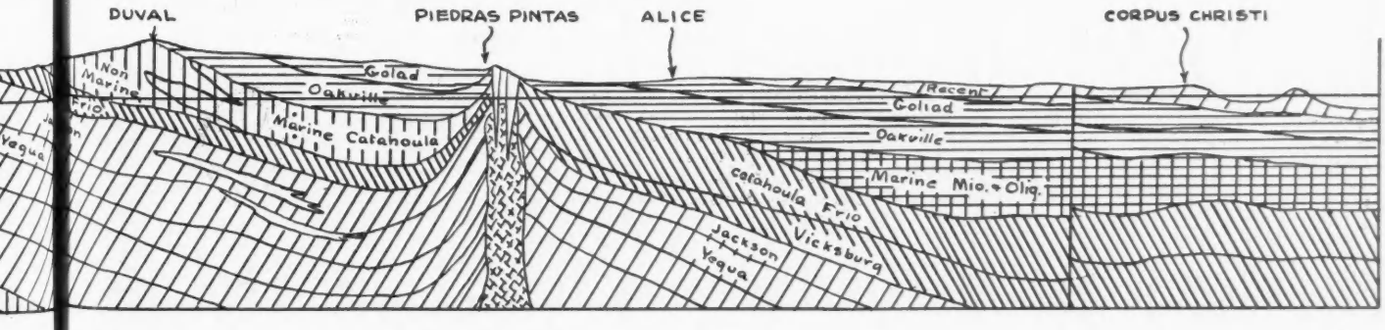
Pearsall Area

For the past several years Frio County has been undergoing a drilling campaign, which is proving up a large producing area that bears promise of being one of the larger oil fields of South Texas. To date commercial production has been obtained from the Navarro, Austin, and Buda formations. Interesting showings have also been found in the Georgetown, Edwards, and Glenrose formations. The structure is apparently a large fold parallel to the Balcones folding zone, and the production is found both in blanket sands and in crevices along the top of the structure. Only one deep well (10,050 feet) has been drilled as yet, but the showings found in it will doubtless be indusive to additional deep tests. The structure is apparently a result of movements involved in the mountain-building in northern Mexico. It is probable that additional structures similar to this well will be found in Frio, Zavalla, Dimmit, La-Salle, Webb and Maverick counties. These counties comprise the head of the Rio Grande embayment, which is probably the largest single geological feature in South Texas. In this basin, structures must be large to provide a trap for the accumulation of oil, as there is little probability of procuring commercial production on minor structural features. On large domes or against large folds the possibilities are excellent. Wells as deep as the Edwards formation across the entire basin are within reach of present drilling equipment and while expensive, large recoveries may be expected. This area is virtually untested at present, but offers great possibilities for future wildcatting.

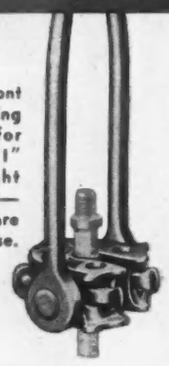
Hill Country

The area west of San Antonio and north of the Frio County, comprises a number of counties in which some wildcatting has been done, but no commercial oil has been found to date. The section consists of a thick series of Cretaceous limes on the sur-

owing above information across another zone of South Texas



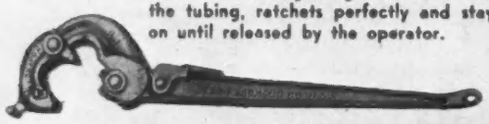
FLASH! NATIONAL PREFERENCE



Equipped with front and rear operating latches; made for rods from 5/8" to 1" —in both a Light and a Heavy Type— BJ Rod Elevators are safe and fast in use.

The BJ "20" Spring Rod Hook is designed for 20-ton strings of rods. Made also with ball bearing and locking arm (but without spring) for 10-ton and 15-ton loads.

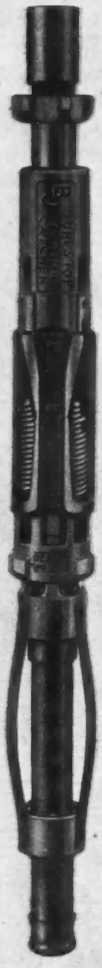
The light-weight, properly balanced BJ Open End Tubing Tong is "stabbed" on the tubing, ratchets perfectly and stays on until released by the operator.



The BJ Snapon completely encircles the tubing and locks in place. The "back-up" lever takes care of cross threads without removing tong from tubing.

For short derricks where overhead clearance is important, use the BJ "30" Tubing Hook, with the strong, safe "locking arm".

The BJ "50" Tubing Hook is safe for 50-ton loads of tubing. Made with the "locking arm" and enclosed relief spring— also —in a size for 75 tons of tubing.



For tubing safety at all times you can depend upon the BJ Surestop Tubing Catcher which sets instantly and stops the fall without injury to casing, tubing or catcher. When set with a BJ Anchor, "tubing breathing" is eliminated, and increased production almost always is secured.

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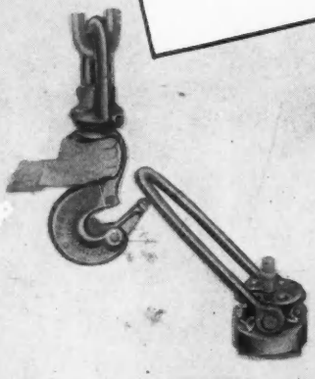

Here's a combination for fast working production crews! Note the open "locking arm" on the BJ "10" Rod Hook (here open to pick up the bail on a BJ Rod Elevator) which closes and locks to form a safe C-link when the load is lifted.

LOOK FOR BJ ON PAGES 288 TO 352 OF THE 1936 COMPOSITE CATALOG

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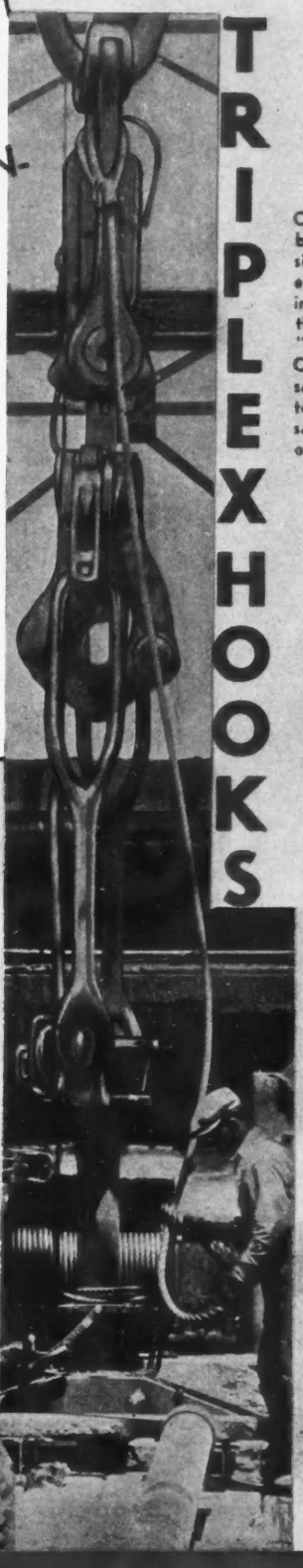
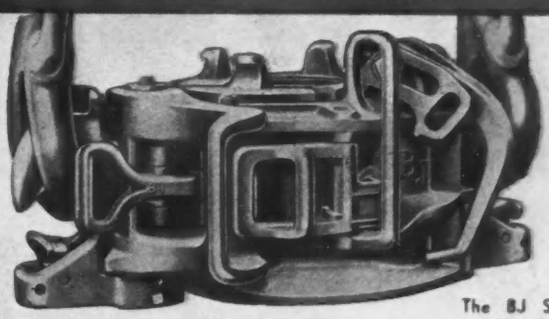
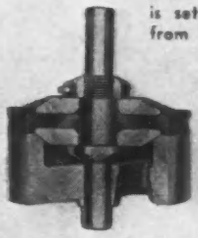


TRIPLEX HOOKS

One hook for the swivel bail and a hook on either side for the elevator links eliminate off-center stress in BJ Triplex Hooks. All three of these hooks have "locking arms" which form C-links and afford complete safety. One size is for 150-ton loads — the "300" is safe for the longest strings of drill pipe or casing.

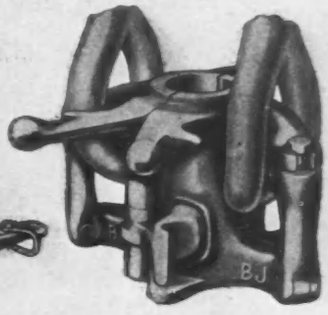


The BJ Side-Door Slip Elevator handles the longest strings of pipe without lifting under the collar or coupling. Four long slips grip the pipe at any desired point. Handled by one man on the derrick board, and may be removed while cement is setting. For all sizes of pipe from 2⅜" to 20".

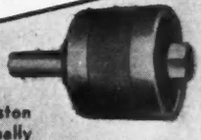


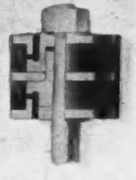
The rubber "shock absorber" in BJ Slush Pump Valves cushions the impact due to seating, and practically doubles the life. They are instantly, completely reversible without adjustment or replacement of parts.

Here is the BJ Extra Heavy Rotary and Casing Tong for fast action in making-up or breaking out Full Hole and other large diameter tool joints—as well as handling casing up to 8⅝" O.D. Safe also for breaking out drill collars, core barrels, etc., but as fast and convenient as lighter types.

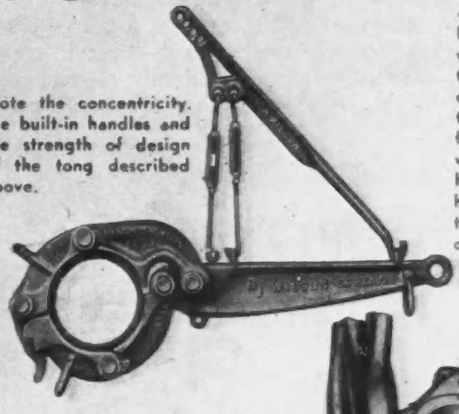


The BJ Pep Piston —with externally operated expansion — offers new efficiency in high pressure pump operation. Made for all sizes of popular make slush pumps.





The efficient BJ (Craig) Pulsating Piston is popular wherever a long-wearing, trouble proof slush pump piston is required. Made for all regular sizes of slush pumps, in standard or high pressure types.



Note the concentricity, the built-in handles and the strength of design of the tong described above.

The fully heat-treated body of the BJ Type A Center Latch Elevator successfully withstands (without upsetting) the terrific pounding effect of tool joints contacted at high speed. Built for long, hard service—with long, safe operating handles, a convenient rear handle—and a latch protected against accidental opening.

BJ Type "G" Elevators are designed and bored to handle upset drill pipe without using lifting plugs. Both the "G" Center Latch and the Side Door Type "B" are safe for the longest, heaviest strings of external upset drill pipe.

BJ

PRODUCTION TOOLS

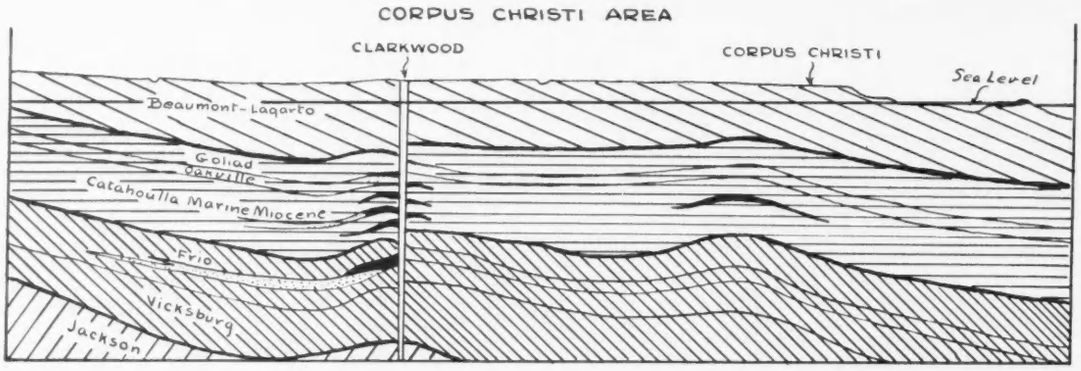


FIGURE 5
Cross section through Saxet Heights areas, showing general condition of structures

face, which are mainly fresh water bearing. Under these are Pennsylvanian shales and sands and in some places Ordovician limes, which is a similar section to that in North and West Texas. Apparently, however, in this area, petroleum accumulation has not been as favorable as it has been on the north side of the Llano Uplift. Drilling has been slow and to date no sure method has been devised to locate subsurface structures. It is likely, however, that at some future day this area will come into promise, and at present should be considered one of possible reserves. It is also an area of expensive drilling and work is rather slow.

Mirando District

One of the most active and most interesting areas in South Texas is that strip of land running through eastern Zapata, eastern Webb, western Jim Hogg, northern Starr and western Duval counties, which has been producing oil and gas in commercial quantities for the last 15 years. The oil comes from the Jackson and Yegua formations, ranging in depth from 400 to 3500 feet. The formations are soft and drilling is relatively rapid and inexpensive. The oil is a peculiar type of mixed base, carrying a large lubricating oil content and cracking to a high octane gasoline. It is much in demand among the refiners. There are approximately 40 fields in this district at present, covering some 30,000 acres. Much discussion has been made in geological circles concerning the regions for accumulation in this district. Over most of the territory, wells were drilled without careful sampling and it has been very difficult to correlate the various producing sands. The surface being of relatively soft material little can be told about the sub-surface structure.

Several wells recently have been cored from top to bottom, providing improved information for correlation work and materially changing many of the early theories. It appears that there are a number of regionally high or positive areas on which sand lenses carry saturation. These lenses may cover several thousand acres. In places these sands are very erratic, merging into shale zones in a distance of a few hundred feet.

Generally speaking, these sands represent old shoreline areas and wherever one of these shorelines crosses a high area, production may be expected in some zone. Only careful drilling can determine the trend of these shorelines and it is to be expected that additional fields will be developed along this strike. At present the Mirando and Government Wells zones have proved most profitable, however the same depositional conditions prevailed throughout Yegua times and the lower sands should eventually prove as satisfactory as the upper zones. It is probable that the present proved reserves and past

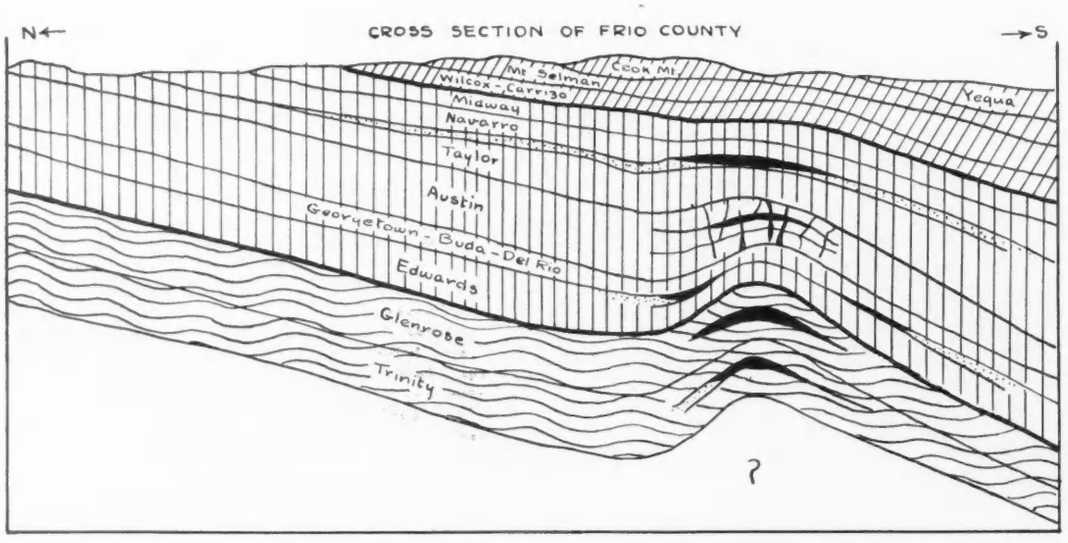


FIGURE 6
Cross section of portion of Frio County, suggesting probable producing zones in Pearsall field.

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recovery, combined, do not exceed 50 percent of what this district will eventually yield.

Pettus District

In the northern part of Bee County and the adjacent area is found a very profitable group of pools in which the general structure of the Balcones region and the sands of the Mirando area are combined. Most of the production to date has come from the Pettus sand of Cockfield age which is approximately at the contact between the Jackson and Yegua formations. The oil is usually of high gravity, rich in gasoline content. One pool, Caesar, yields a Mirando type crude. The district first attracted attention through gas in deep water wells, but following the discovery of oil in 1928, an active play started which is still in progress.

The area has been prospected rather thoroughly, and probably all the larger pools have been found. There are at least a dozen small areas that indicate production when drilled. This is one region in which drilling records, supplemented by paleontology, can be considered as quite accurate, and while the structural pattern is complicated by a series of faults, it can be worked out. Considerable surface work has been done, despite poor outcrops, and this work has been of considerable help. Geophysical work has not been general, but where done seems to be of great aid in determining subsurface structure.

The Pettus sand is a blanket formation with the production due entirely to structure. Some oil has been found in the Whitsett and Hockleyensis sands of Younger Jackson age; probably in sand lenses.

Only one deep well has been drilled and it will take several more to say whether or not deeper producing zones can be developed. From what little is known of the section, it appears likely the Yegua and Cook Mountain formations should produce oil. It is interesting to note that the edges of the Pettus sand zone to the northeast and west produce either gas or oil in very small quantities, indicating either the presence of conditions exceptionally well suited to the formation of petroleum at the time of deposition or the migration of the oil over considerable distances. This is merely one of the numerous unsolved geologic problems of this district.

Due to the excellent structural conditions, it is possible there will be deep exploration to the Edwards limestone, which may be expected at depths ranging below 10,000 feet, depending on locations.

Rio Grande Valley

In the last few years oil production has spread southeast from the Laredo trend to the Rio Grande River. To date only one major pool, Samfordyce, has been found. Several others, such as Barbacoas, Mestenas, Rio Grande City, Mercedes, are on production, but are hardly of first class calibre as yet.

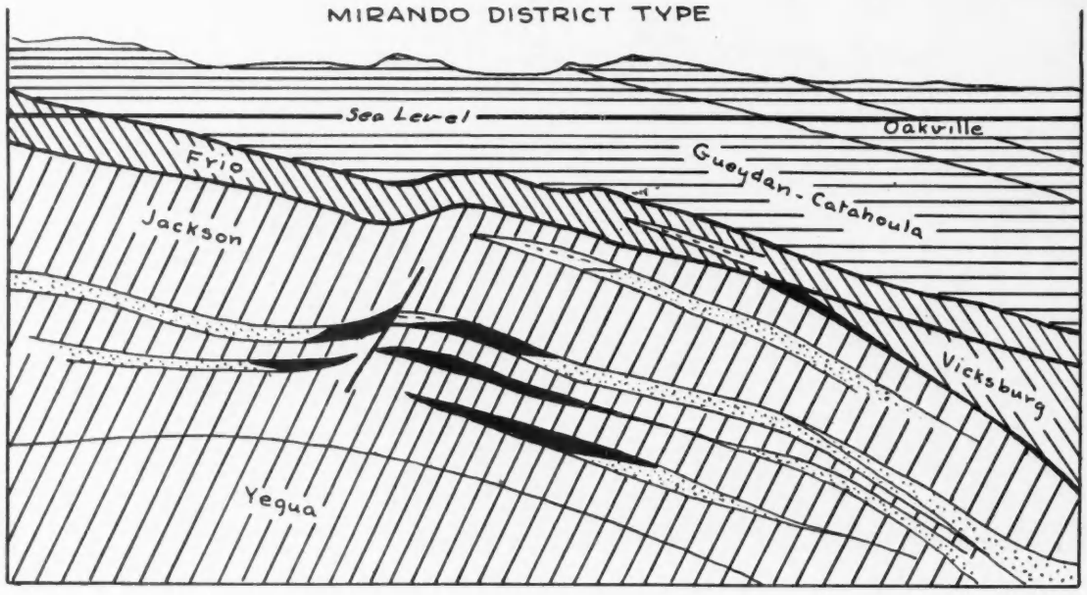

FIGURE 7
Mirando type of structure, showing lensing situation in Jackson zone

Samfordyce production appears to be from sand lenses on the west flank of a large fold. Although several miles long, it is still being developed. Owing to the major size of the structure deeper zones can be expected, as well as probable sand lenses on the northeast flank. The oil is coming from three sand zones at 2700 to 2900 feet, about 1200 to 1400 feet in the Frio formation. The Vicksburg formation is reached at 3100 feet on top of the structure and the Jackson at 4600. The former is marine, but not very sandy, and the latter is practically untested.

The regional dip in this area is very steep on the top of the Jackson as only 200 feet of Vicksburg are found in the Barbacoas field, and 1500 in Samfordyce. Two miles east of the latter field the dip is nearly 1200 feet, which might indicate a fault on the east or a steep flexure along an old continental shelf. At McAllen the Vicksburg is expected at 6300-6500 feet and in the Mercedes area around 8600 feet.

Not too much information is available on this district,as it has only been of interest for the past three

North of the river the region is very low structurally, being the mouth of the Rio Grande Embayment, and the same conditions will probably be present there as found in the Corpus Christi area. Due to the peculiar position of this district in relation to the mountains and huge northwest-southeast trending structures of Mexico, it is highly probable some

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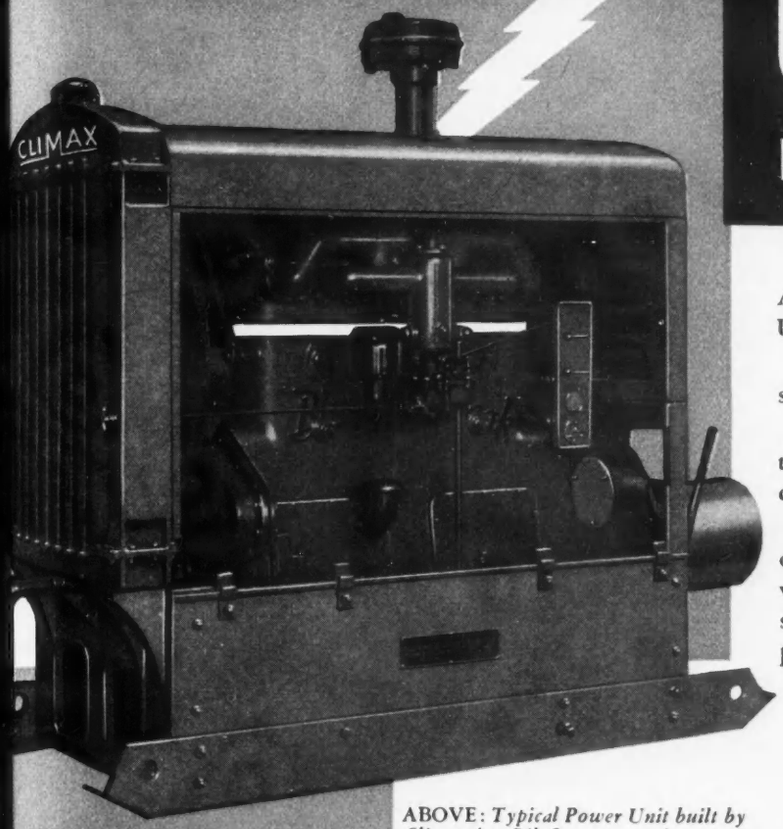

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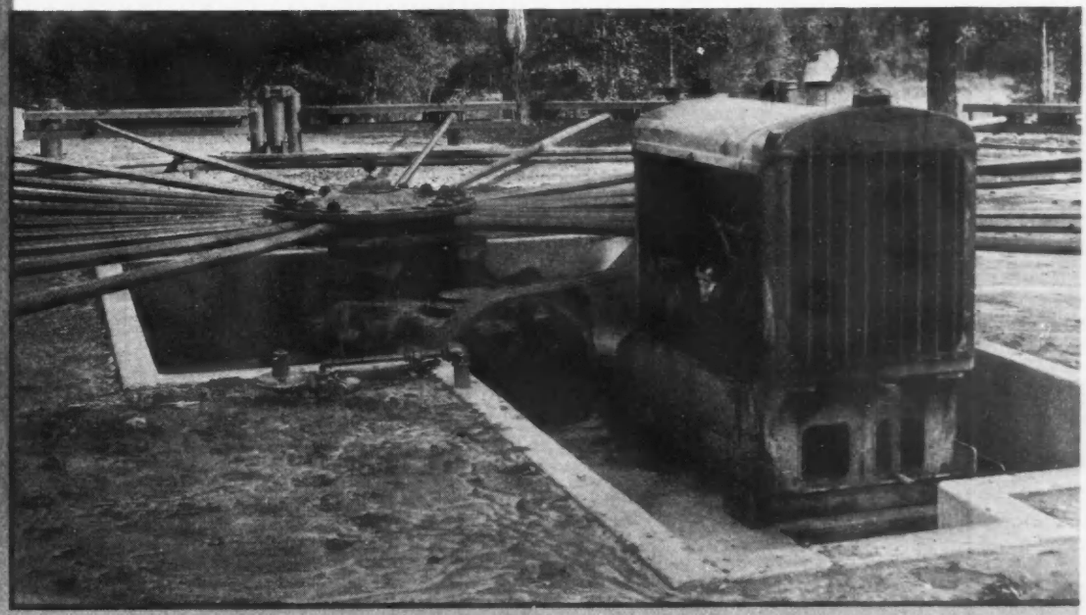

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of the structures are of tremendous size. Should future development prove productive sands on these structures, fields of major importance may be expected.

Corpus Christi Area

This is a rather general name for this area, which embraces Victoria, Calhoun, Refugio, Aransas, Nueces, San Patricio, Jim Wells counties. Geologically speaking, it is a high area between the Salt Dome area around Houston, and the Salt Dome basin of southeast Duval, Kennedy, Kleberg and Brooks counties. The surface formations are practically all recent in age, and to date oil production has been entirely from beds in the Miocene and Oligocene formations. At present some 25 areas are producing in this district, half of which are major fields. They cover some 20,500 acres, on which 1420 wells have been drilled, and 60,000,000 barrels of oil recovered. The reserves are also quite large, 288,000,000 barrels of recoverable oil being considered present. Good production is present solely on large structures. Some spots reasonably well located, but with poor sands, found showings indicating that sand deposition also is a prime factor in this area. In general the district is well spotted with test holes, and the abundant use of the core barrel and the electric survey indicates that but few major pools remain to be found in the present known sands. Deeper zones, however, remain another story. Ten wells have been drilled to below 8000 feet. One 9000-foot test in Refugio field, cored a very good oil sand, indicating enough to warrant setting casing, but it failed to produce. With the increase in efficiency in drilling equipment this area should receive a number of early tests to record depths. There is no reason to presume that the entire section within reach of the drill, to at least 15,000 feet should not be considered as a potential oil reserve.

Southwestern Salt Basin

This is an area which appears to be due for a considerable play. It includes the southwestern part of Duval, Brooks, Kennedy, Kleberg and probably parts of Hidalgo, Willacy and Cameron counties. It is the deepest part of the Rio Grande Embayment, and is similar, technically, to the Houston salt basin at the head of the East Texas Embayment. At least four domes, Palangana, Piedras Pintas, Alta Verde, and Alta Mesa, have already yielded some oil in commercial quantities. There are at least a dozen other known domes, and when the area has been prospected accurately a large number of additional ones will be added to the list. Most of the domes found to date are of the piercement type, with uplift as much as 3500 feet. While some nice wells have been found on Piedras Pintas, this type of dome has not proved as satisfactory for drilling operations as is the deep buried dome with blanket sands over the entire plug. Also, piercement type domes have considerable faulting connected with them, which renders geologic work quite difficult, and adds greatly to the expense of development. Careful geophysical work should disclose the presence of deep buried domes in this district, and it is to be expected that several large folds will result therefrom.

Conclusions

In summing up South Texas geological features and potentialities, it easily can be seen that the story is only partly told. The present trend of drilling in new regions, particularly to deeper zones, is constantly changing accepted patterns and manners of operation.

A study of the accompanying cross sections will show the possibilities of prospecting the majority of South Texas to depths ranging downward from 10,000 feet, and in many cases to 15,000 feet and deeper. The greater depths with greater recovery and heavier pressures will likely compensate for the increased cost of operation. This deeper drilling, of course, will depend mainly on development of equipment and market conditions.

In studying the reserve situation, it must be borne in mind that possibilities from present zones at the relative same depths are not exhausted. It is not only likely, but highly probable, that numerous new producing areas will be found on trend where fields are producing already. Likewise, some of these may prove of major importance and possibly exceed corresponding present productive fields.

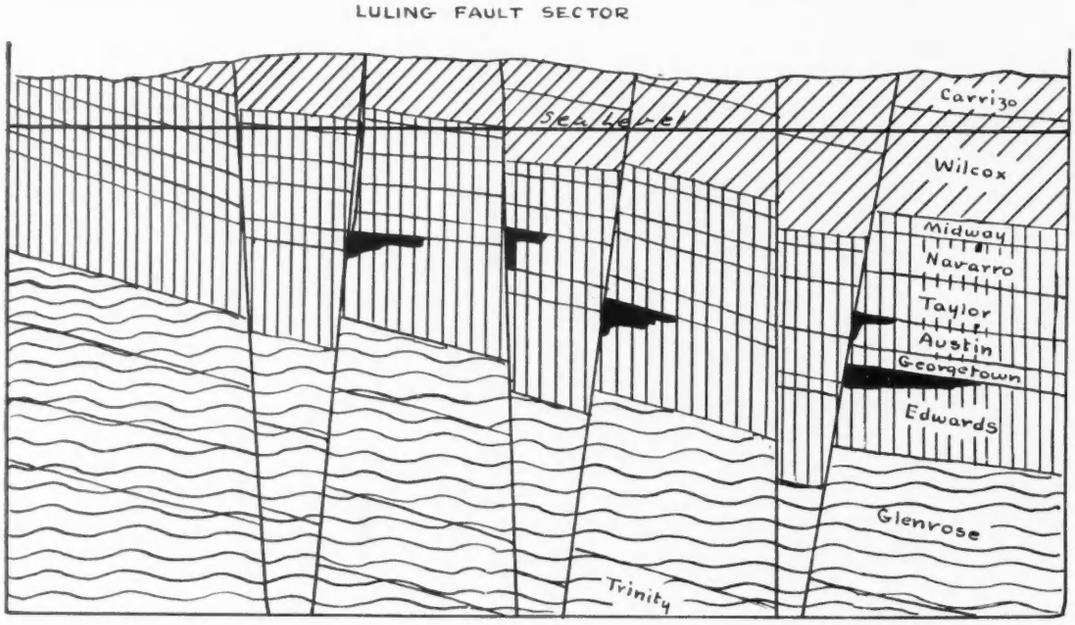
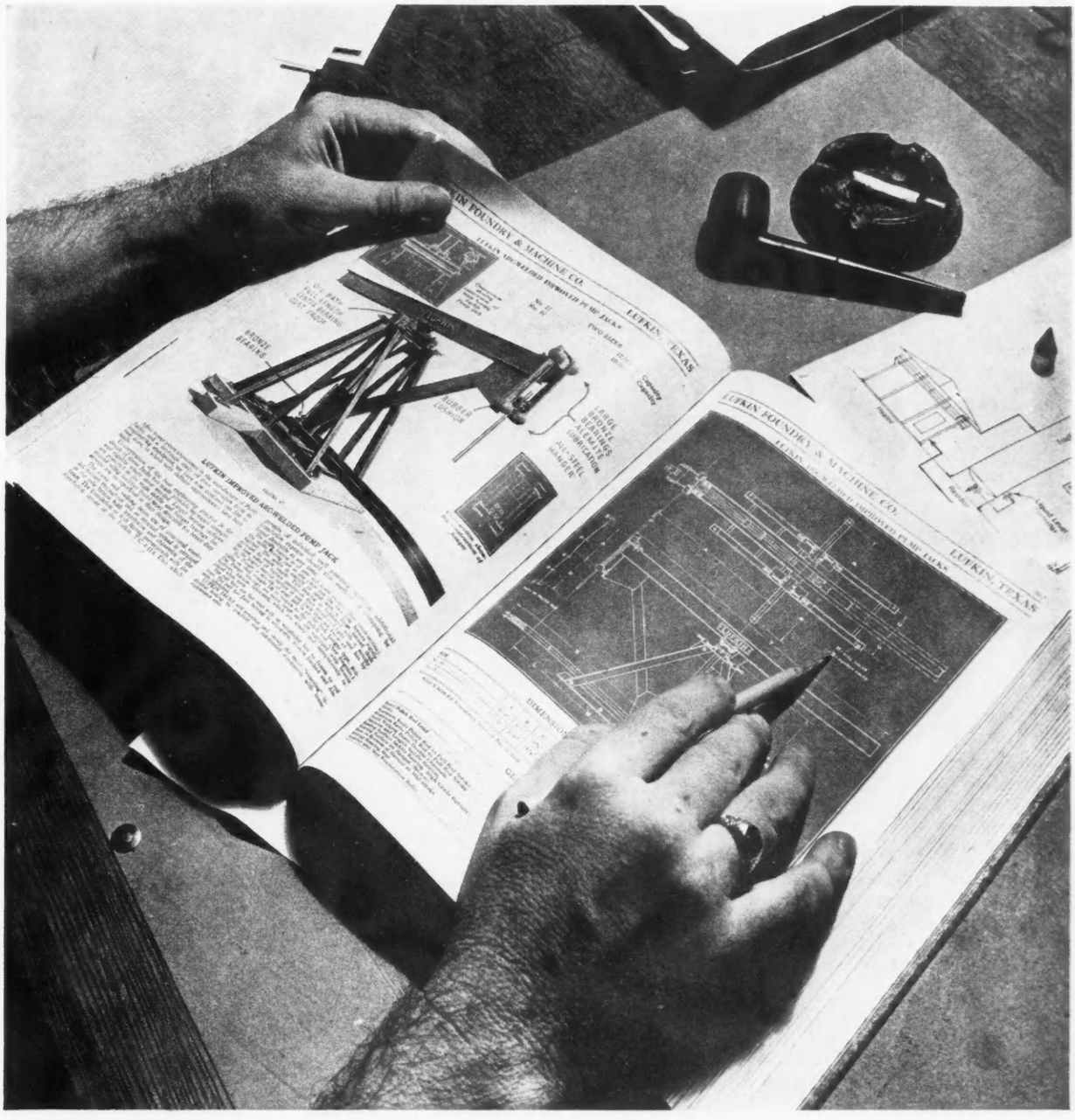


FIGURE 8

Cross section in immediate sector of Luling - Salt Flat fields



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ADEQUATE PIPE LINE SYSTEMS AND DEEP WATER PORTS MAKE

Marketing Conditions Ideal in South Texas

By EARL S. POST, Staff Writer

IDEAL marketing conditions through the majority of the district is one of the main attractions of South Texas to developers, both major and independent. A complete network of trunk pipe lines, most of which terminate at deep water ports, has been constructed. New projects constantly are underway to further increase these facilities.

The situation is especially exemplified in the fact that reasonable allowables are given to producers in various fields. As a result of the accessibility of the territory to market and the numerous pipe lines, prices being paid for crude compare most favorably with other portions of the Mid-Continent. In many instances, the figures are higher.

Several lines from the West Texas fields traverse the entire South Texas territory to carry crude some 450 miles to deep water port sector at Aransas Pass. The majority of the South Texas production, on the other hand, is located from 5 to 125 miles from these deep water ports and can be carried through short lines to ocean terminals.

With the construction of deep water ports in the Brownsville area, Corpus Christi-Port Aransas district, and the intercoastal canal, this marketing situation has been made ideal. In fact, the foreign demand for this district's crude has become a most important factor due to adequate shipping facilities.

A most desirable situation is being developed through the building of the intercoastal canal connecting with major deep water ports along the South Texas Coast. It provides an outlet for fields along this lower bank through the building of short lines to the smaller ports. The oil is loaded onto barges and carried to the larger ports. One place in which this practice is now being followed is Port Lavaca. One line out of the Port Lavaca field and another out of the Placedo field have for their terminus a refinery at this port. Some of the oil is refined at this point and both crude and refined oil are barged to Corpus Christi.

Of course, the main development concerning pipe lines in South Texas during recent years has seen the expansion of Corpus Christi into a major port. This port, handling millions of barrels of crude per year, has been the building of a number of new lines, terminals, refineries and even an extension to the channel to care for crude now being piped. Storage facilities, calculated in many hundred thousand barrels, recently have been constructed to create one of the key export points for the Gulf Coast.

Port Isabel, likewise, is a new proposition. Its completion comes at a time when a heavy development of the lower Rio Grande Valley's oil reserves is underway. Several new fields have been established during the past year and large blocks of acreage have been assembled for the purpose of exploration. Geophysical work indicates that this area has great potentialities, and possibly will be an important oil-producing district. Only one oil line serves this new sector, but other construction undoubtedly will follow field developments.

Gas Pipe Lines

Natural gas from the large reserves of South Texas is supplying a major portion of the Gulf Coast as well as a portion of Northern Mexico. A most complete system of pipe lines, controlled by several major gas distributing and marketing concerns, running from these fields to cities, towns and manufacturing concerns as far east as the Louisiana state line and as far south as Monterrey, N. L., Mexico. This particular industry rivals oil production in importance in South Texas.

South Texas pipe lines bring about numerous engineering problems, the result of the varied types of territory served. Corrosion and other forms of deterioration, must be overcome through different methods.

Maintenance of gas lines, especially, has been an interesting and important factor in this industry. United Gas Public Service Company, Texas Gas Utilities Company and Houston Pipe Line Company, who control the majority of the gas lines from this district, are constantly revising methods of handling these problems.

Pipe line bridges have been constructed across several creeks in an effort to elevate the lines from the highly corrosive beds. In other cases, constant replacement of lines in short areas has become necessary despite the fact that pipe treatment has been attempted. Electrical devices, also, have been used with some degree of success. The lines, however, are constantly checked to maintain the highly important service involving several billion cubic feet annually.

Oil lines, likewise, are a problem, especially in the lower coastal country, where the pipes are laid in marshes, caliche and in several cases actually in the beds of salt bays.

Oil and Gas Pipe Lines in South Texas

COMPANY	Origin	Terminus	Size, Inches	Miles
Amerada Petroleum Corporation	Pearsall Field	Melon	6	12
Atlantic Pipe Line Company	Refugio	Harbor Island	8-6	37
Atlantic Pipe Line Company	Greta	Refugio	6-8	8
Barnsdall Pipe Line Company	Placedo	Port Lavaca	3-3	13
E. L. Buckley	Clara Driscoll	Banquette	5½	10
Chapman Pipe Line	Chapman	Thrall	4	10
Carolina-Tex Pipe Line Company	Carolina-Tex	Oilton	3	8
Cardinal Pipe Line Company	Jacobs	Whitsett	3	8
Crouch Oil Company	Zoboroski	Darst Creek	2	12
Crown Central Pipe Line Company	Mirando City	Aviators	4	8
Crude Oil Pipe Line Company	Government Wells	Corpus Christi (via San Diego)	5¼	70
Dodd & Weigarten	Los Olmos	Rio Grande City	3-4	8
Crude Oil Pipe Line Company	Moca	Benavides	4	40
Deer Oil Corporation	Luling	Darst Creek	4	12
Falcon Pipe Line Company	Caesar	Pettus	4	7
Grayburg Oil Company	Zoboroski	S. Darst Creek	2½	7
Gulf Pipe Line Company	Luling	Darst Creek	4½	12
Gulf Pipe Line Company	Darst Creek	Crosby	8	207
Grayburg Oil Company	Somerset	San Antonio	4	20
Humble Pipe Line Company	Darst Creek	Salt Flat	6-8	14
Humble Pipe Line Company	Pettus	Refugio	4-8	38
Humble Pipe Line Company	Refugio	Inglesides	8	29
Humble Pipe Line Company	Refugio	Greta	8	8
Humble Pipe Line Company	Refugio	Tomoconnor	8	7
Humble Pipe Line Company	Kingsville	Railroad	4	5
Humble Pipe Line Company	Mirando	Inglesides	8	110
Humble Pipe Line Company	Luling	Hilbig (Lytton Springs)	6	30
Humble Pipe Line Company	Tomoconnor	Heyser	6	20
Humble Pipe Line Company	Luling	West Columbia	8	127
Humble Pipe Line Company	Government Wells	Benavides	8	28
Humble Pipe Line Company	Big Lake	Inglesides	12-12	75
Humble Pipe Line Company	O'Connor	Greta	4	12
Houston Pipe Line Company*	White Point	Main Line (via Refugio)	12	*54
Houston Pipe Line Company*	Carolina	Houston (via Lucas, Edna, Wharton)	12¾-16-18	*276
Houston Pipe Line Company*	Edna	Houston (via Bryan Mound)	12¾-16	*135
Houston Pipe Line Company	North Pettus	Pettus	4	7
Houston Pipe Line Company	Viola	Corpus Christi	4	8
Houston Pipe Line Company	Refugio	Main Line	12¾	18
Illinois Pipe Line Company	Yates	Devine	10	225
Live Oak Gas Company*	Pettus Field	Three Rivers	3	*42
Logco Pipe Line Company	Caesar	Burnell	4	4
Luna Oil and Gas Company*	Tuleta	Pettus	4	*4
Magnolia Pipe Line Company	Luling	Mirando City	6	184
Magnolia Pipe Line Company	Luling	Hull	10	210
Magnolia Pipe Line Company	Luling	Yost & Dale	4	37
Magnolia Petroleum Company†	Luling	San Antonio	3	†50
Pioneer Pipe Line Company	Eckert	Somerset	2½	14
Pitzer-West & Boone	Yost	Dale	4	8
Pettus Refining Company	Dinero	Mathis	2	10
Pettus Refining Company	North Pettus	Pettus	2	5
Potter Pipe Line Company	Clarkwood	Corpus Christi	6-8	12
Rio Grande Valley Gas Company	Main Line—Jim Hogg County	Brownsville	12	150
Republic Pipe Line Company	Saxet	Corpus Christi	4	8
Republic Pipe Line Company	Plymouth	Corpus Christi	5	20
Rosenburg Pipe Line Company	Laurel	Oilton	4	5
Rio Gas & Power Company	Barbacosa	Rio Grande City	2	11½
Shell Pipe Line Company	McCamey	Houston	10-12	412
Shell Pipe Line Company	Mauritz	Markham	6	16
Southwest Gas Company*	Fordtram	Yoakum	4	*20
Shell Pipe Line Company	Salt Flat	Bastrop Station	6	33
Sinton Pipe Line Company	Plymouth	Corpus Christi	8	17½
Texas Pipe Line Company	Sullivan	Rosanky Station	6	58
Texas Pipe Line Company	Greta	Refugio	6	8
Texas Pipe Line Company	McCamey	Houston	10-12	250
Texas Pipe Line Company	San Marcos	San Antonio	6	40
Texas Pipe Line Company	Greta	Plymouth	8	26
Texas Pipe Line Company	Cow Hill	Uvalde	4	*13
Texas Gas Utilities*	Cow Hill	Carrizo Springs	4	*40
Texas Gas Utilities*	Chittim	Eagle Pass	6	*16
Texas Gas Utilities*	Chittim	Del Rio	10	*58
Texas Gas Utilities*	Chittim	Cow Hill—Crystal City Line	6	*40
Texpata Pipe Line Company	H. W. F. Field	Mirando City (via Mirando Valley)	4	17
United Gas System*	White Point–Saxet	Robstown	4	*12½
United Gas System*	White Point	Taft	4	*7
United Gas System*	White Point (via Inglesides)	Aransas	6-4	*22
United Gas System*	Brum	Hebbronville	2-4	*8½
United Gas System*	Aguilares (via Mirando City)	Oilton	4-2	*8½
United Gas System*	Bruni, San Antonio Line	Three Rivers	4	*9½
United Gas System*	Laredo	Irrigation Plants	4	*12
United Gas System*	Laredo, North	Irrigation Plants	4	*6
United Gas System*	Bruni (via Callihan)	San Antonio	12	*140
United Gas System*	Bruni (del. to Monterrey through)	Roma	8-10-12	*64
United Gas System*	Carolina Tex	Laredo	8	*45
United Gas System*	Bruni (via Beeville)	San Antonio	14-18-20	*172
United Gas System*	Refugio (via Converse)	Austin	12-16-18	*175
United Gas System*	Buda	Halletsville	12-10-8 & 6	*130
United Gas System*	Medina Field	San Antonio	8	*36
United Gas System*	Medina Field	D'Hanis	6-8	*46
United Gas System*	San Antonio	New Braunfels	8-14-18	*46
United Gas System*	White Point	Houston	14-16	*154
United Gas System*	Jennings	Laredo	6	*26
United Gas System*	New Braunfels	Seguin	6	*12
United Gas System*	Main Line (Kennedy)	Yorktown	8	*18
United Gas System*	San Antonio Junc.	Saspamco	6	*9
United Gas System*	Gas Ridge	South Junction	8	*14
United Gas System*	Frio Road	Kelly Field & Camp Normyle	4	*7
United Gas System*	White Point	Sinton		*14
United Gas System*	White Point-Sinton	Odem	2	*5.6
Utilities Fuel Supply*	Refugio	Nursery	4	*48
Valley Pipe Line Company	Samfordyce	Port Lavaca	5½	85
Williamson County Pipe Line Company	Chapman	Thrall	4	9
Wood-Moore Corporation	Port Lavaca Field	Port Lavaca	4	4
Southwest Gas Company*	Edna	Luling	8	*80
Southwest Gas Company*	Main Line	Cuero	4	*18

* Gas line. † Gasoline line.

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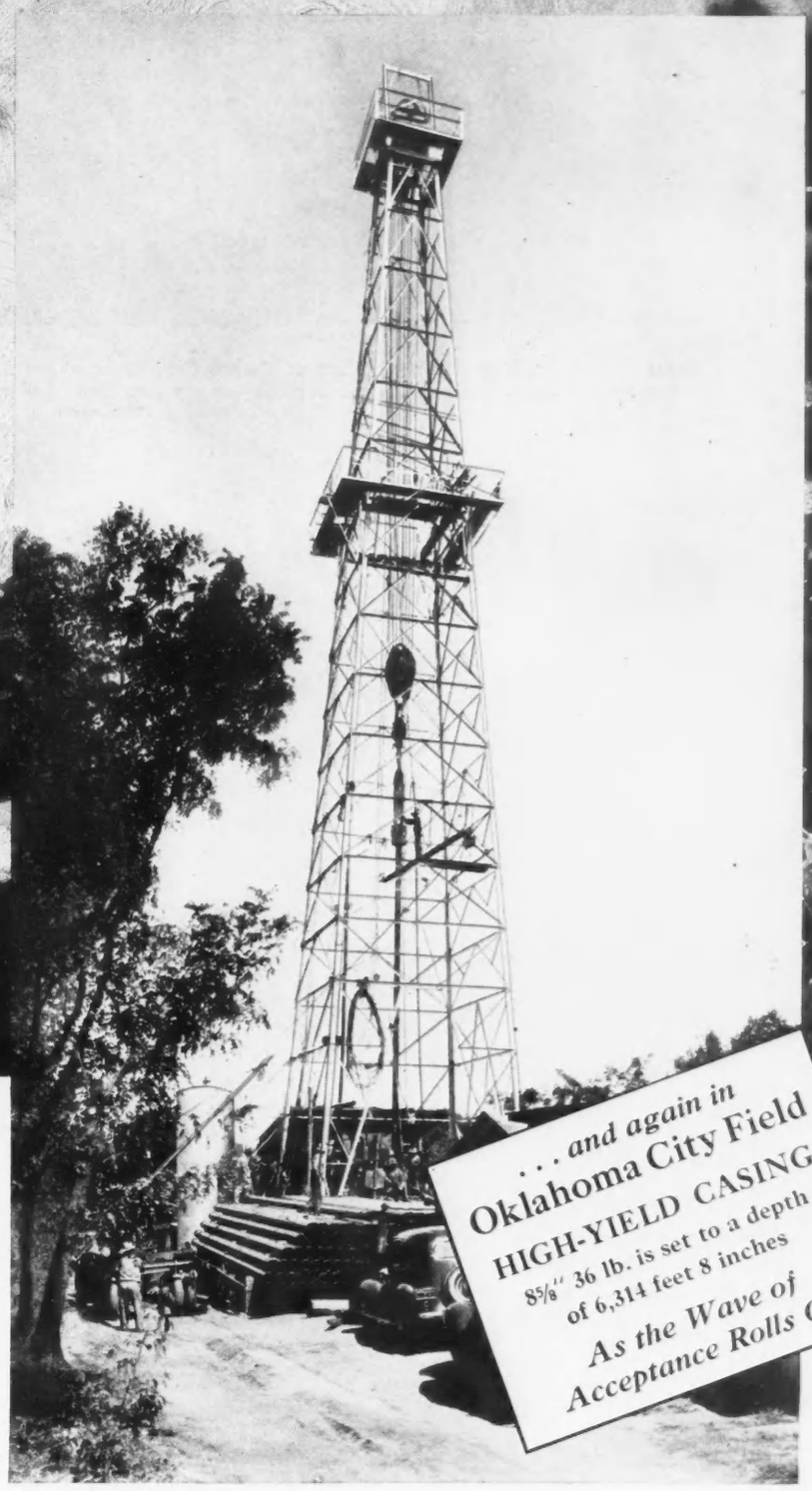

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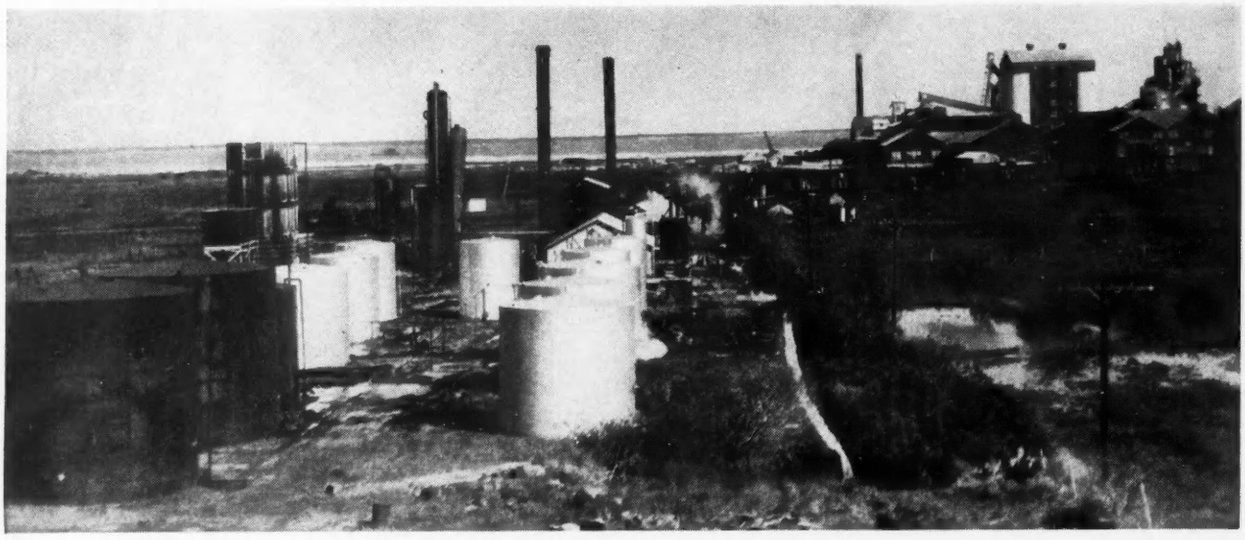


Corpus Christi Refining Company plant at Corpus Christi. Southern Alkali Corporation's plant, shown in the background, manufactures chemicals for the oil refining industry and is an important consumer of gas produced in the area.

South Texas Refining

DURING PAST YEAR HAS BEEN FEATURED BY ENLARGED CAPACITIES

By EARL S. POST, Staff Writer

NEW construction during the past 12 months has boosted the capacity of South Texas refineries to 62,700 barrels per day. This building program is in line with increased output from fields in this district.

The majority of the projects have been in the vicinity of Port Isabel and Corpus Christi deep-water ports, the output being handled in part in tankers for export and coastwise shipment.

These plants are running at only 68 percent of their capacities, or handling 43,600 barrels of crude per day. There are 29 refineries in the district, including the several now under construction.

Five natural gasoline plants located in various gas fields have a capacity of 96,750 gallons per day, but are not running at capacity.

The largest single project of the past year has been by Corpus Christi Refining Company on the Corpus Christi Ship Channel. This plant, originally had a capacity of 1000 barrels. Last year it was increased to 3000 barrels and at this time work is progressing on a cracking unit, which will boost the total capacity to 8000 barrels. Amsco Refining Company also is building a new plant on the channel, the completed project expected to rival the Corpus Christi refinery in size. A couple of other very small plants are either under construction or planned for this immediate area, the majority of their products expected to be for local market.

At the Port Isabel deep water basin, recently opened to sea travel, Coastal Refineries, Inc., has completed a 6000-barrel plant which is handling about 5500 barrels of crude per day. This ultra-modern refinery, although completed only a few months, is at this time making further additions.

Wood-Moore Refining Company constructed a 2000-barrel skimming plant at Port Lavaca, the plant handling both Port Lavaca and Placedo crudes. The refined product is shipped on barges from this port on the inter-coastal canal to Corpus Christi for export. This development gives rise to the possibilities of the construction of other small refineries along the inter-coastal canal in close proximity to fields. The cost of gathering the crude will be reduced to a minimum and it can be handled cheaply on barges to its destination.

A small amount of new construction and reclamation work in other parts of South Texas was reported during the past year, but it was of minor importance.

South Texas Refinery Operations

Mid-Year, 1936

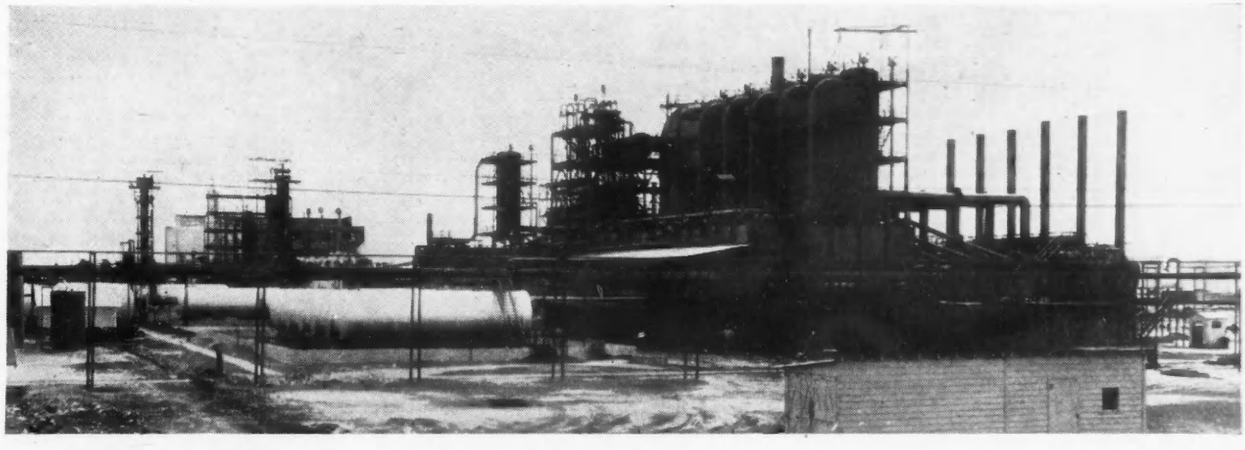
COMPANY AND LOCATION	Type	Capacity, Barrels	Daily Thru-Put, Barrels	Kind f Crude	Remarks
All State Refining Company, Thrall	Skimming	2,500	.....	Chapman	Shut down
Amsco Refining Company, Mirando City	Cracking	3,700	3,150	Mirando-Bruni	Operating
Amsco Refining Company, Corpus Christi	Skimming	1,000	.....	Corpus Christi	Building
Aztec Petroleum Company, Hondo	Skimming	50	10	Ina	Operating
Beneco Refining Company, Three Rivers	Lube Oil	300	50	Callihan	Operating
Corpus Christi Refining Company, Corpus Christi	Cracking	8,000	2,250	Mirando-Bruni, Saxet-Jacobs-Placedo	Operating
Coastal Refining Company, Port Isabel	Cracking	6,000	5,500	Samfordyce	Operating
Citizens Refining Company, Luling	Skimming	400	.....	East Texas	Shut down
Chapa Refining Company, Laredo	Skimming	100	.....	Laurel	Shut down
Hausman Refining Company, Laredo	Skimming	225	.....	Mirando	Shut down
Houston Oil Company, Viola	Skimming	1,000	500	Saxet and Lucas light, Pettus	Operating
Humble Oil & Refining Company, Inglesides	Cracking	23,000	15,000	West Texas-Mirando, and others	Operating
Midway Refining Company, Pettus	Skimming	1,000	600	Pettus-Tuleta	Operating
Minerva Refining Company, Minerva	Skimming	1,500	225	Minerva-Rockdale	Operating
Magnolia Petroleum Company, Luling	Cracking	6,500	4,750	Luling, Lytton, Darst, Dale, Thrall	Operating
Pioneer Oil & Refining Company, Somerset	Skimming	1,500	1,000	Bexar County, Jacobs, Calliham and Pearsall	Operating
Parren Refining Company, San Antonio	Skimming	500	400	Port Lavaca and Pettus	Operating
Phoenix Refining Company, San Antonio	Skimming	1,000	670	Bexar County and Pettus	Operating
Phoenix Refining Company, San Antonio	Lube Oil	250	150	Jacob	Operating
Phoenix Refining Company, Bruni	Skimming	500	300	Bruni	Operating
Phoenix Refining Company, Laredo	Skimming	1,500	.....	.....	Shut down
Wood-Moore Refining Company, Port Lavaca	Skimming	2,000	550	Port Lavaca and Placedo	Operating
Pettus Refining Company, Pettus	Skimming	1,000	500	Bee County	Operating
Pettus Refining Company, Mathis	Skimming	1,000	440	Calliham, McNeil-Pettus, N. Lucas, Lucas	Operating
Rado Refining Company, McAllen	Skimming	300	225	Cuevitas	Operating
San Antonio Refining Company, Southton	Skimming	200	20	Somerset	Operating *
Sullivan Refining Company, Samfordyce	Skimming	500	.....	Samfordyce	Shut down
Taylor Refining Company, Taylor	Skimming	3,000	825	Beyersville-Chapman	Operating
The Texas Company, San Antonio	Cracking	4,500	3,450	New Mexico	Operating
Valley Refining Company, Harlingen	Skimming	1,000	375	Roma-Cuevitas, Mercedes-Rio Grande City	.....

* Part time.

South Texas Natural Gasoline Plants

Mid-Year, 1936

COMPANY AND LOCATION	Type	Capacity, Gallons	Gas Used	Status
Clymore Gasoline Company, Refugio	Absorption	40,000	Refugio	Operating
United Gas System, Agua Dulce	Absorption	18,000	Agua Dulce	Operating
United Gas System, Refugio	Absorption	30,000	Refugio	Operating
J. H. Webb, Chittim	Separator	750	Chittim	Operating
Manhattan Gasoline Company, Plymouth	Absorption	8,000	Plymouth and Sinton	Operating



Humble Oil & Refining Company's plant at Ingleside is the largest and best equipped plant in the district. It is at the terminus of an important system of pipe lines and on deep water.

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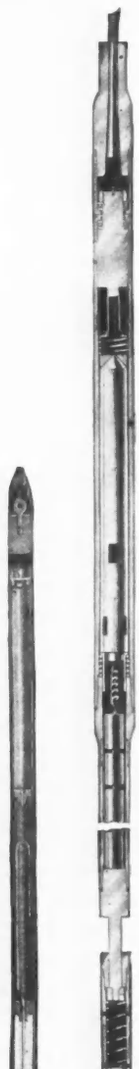

Self Checking **H-K** (HEWITT) (KUSTER) **Clinograph**

Self Checking **SURWEL** GYROSCOPIC CLINOGRAPH

Self Checking **SYFO Clinograph**

"H-K"—designed for open holes only—provides permanent, accurate, photographic records of inclination and direction on paper discs five minutes after removing instrument from hole. (U. S. Patents 1,812,994, 2,027,642 and others pending.)

"SURWEL" provides a map of the well at all depths, prepared from actual photographic records, made while going in and coming out. (U. S. Patents 1,124,068; 1,812,994; 1,959,141; 1,960,038; 2,012,455; 2,012,456 and others pending.)

"SYFO"—used on a wire line, as a "Go-Devil" inside the drill stem, or on sand or bailing line in open hole—affords quick, inexpensive daily records of vertical deviation in drilling, without the use of dangerous acids. (U. S. Patents 1,962,634; 2,013,875 and others pending.)

SPERRY-SUN WELL SURVEYING COMPANY

1608 Walnut Street, Philadelphia, Pa.

TULSA, OKLAHOMA
425 Petroleum Building

HOUSTON, TEXAS
3118 Blodgett Avenue

LONG BEACH, CALIF.
549 E. Bixby Rd., (3800 Block—Atlantic Ave.)

SOUTH TEXAS OIL FIELDS and Prospects

Compiled by EARL S. POST of THE OIL WEEKLY Staff

Acknowledgment is made to the many operators and companies who have cooperated in the following compilation by making available their records and checking the data presented.

All information as of mid-year, 1936, unless otherwise specified

ARANSAS COUNTY

McCAMPBELL—(ARANSAS PASS)

Section 42, McCampbell subdivision, James Orich Survey, 2 mi nw Aransas Pass. **Means of Discovery:** Geological and geophysical information. **Discovery Data:** Buckingham Oil & Gas Co.'s McCampbell 1, completed July 25, 1936, flowing 250 barrels 40.5 gravity oil and 10,000,000 cu ft gas; 7/64-in choke; 2250 lbs tubing, 2575 lbs casing pressure; total depth 7501 ft; producing horizon 6539-54 ft; elevation 15 ft derrick floor; plugged back, sidetracked and drilled to 6560 ft, set 7-in casing on bottom, perforated at 6539-47 and 6551-54 ft. **Geological Data:** Anticline; too new for details. **Producing Horizon:** Marginulina, top 6384-6447 ft. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 well. **Daily Production:** Aug. 1, 1936, 90 bbls. **Rigs Running Aug. 1, 1936:** 2. **Principal Leaseholders:** E. H. Stapper et al, Buckingham Oil & Gas Co., Atlantic Oil Producing Co. **Remarks:** Atlantic Oil Producing Co. purchased ½ interest in major portion of block before discovery well complete and contracted to drill 20 wells.

ATASCOSA COUNTY

SOMERSET

Includes area including and between John Sharp and John Wilson Surveys, 1 mi s Somerset. **Means of Discovery:** Water well showed oil and was completed as a commercial producer. **Discovery Data:** C. Kurz's Fee 1, completed 1911, pumping about 20 bbls 34 gravity oil, approximately 900 feet. **Geological Data:** Series of sand lenses. **Producing Horizon:** Navarro-Taylor series. **Producing Area:** 11,390 acres. **Extent of Development:** (to Jan. 1, 1936) 1240 wells; 1180 oil wells; 14 gas wells; 46 failures. (During 6 months 1936) no wells completed. **Deepest Hole:** Milham Corporation (Ballard & Underwood) Easterwood 1, abandoned in Trinity 5311 ft. **Daily Production Aug. 1, 1936:** 678 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Pioneer Oil & Ref. Co. has own line and runs oil to refinery in field; Frontier Oil Co., Texas Petroleum Co., and Grayburg Oil Co. gather own oil and deliver it to Grayburg pipe line to Phoenix Refining Co. at San Antonio. **Reserve Data:** 12,250,000 bbls ultimate from proven area; 10,178,826 bbls recovered to Jan. 1, 1936; 128,045 bbls recovered first 6 months 1936. **Principal Leaseholders:** Carruthers Co., Consolidated Oil, Empire Gas & Fuel Co., Frontier Oil Co., Grayburg Oil Co., Helvetia Oil Co., Idaho Oil Co., A. E. Johnson, A. A. Kurz, Pioneer Oil, Gas & Refining Co., Somerset Crude Oil & Refining Co., Texas Petroleum Co. **Remarks:** Production developed between 900 and 2100 ft. This report includes area to northeast of field sometimes referred to as South Medina.

ANCHORAGE*

Centering around F. de la Garza Survey, 1 mi nw Anchorage. **Means of Discovery:** Geophysical survey indicated possible serpentine plug. Considerable geological work done. **Extent of Discovery:** Helvetia Oil Co.'s Susie Pratt 1 drilled to 2434 ft after encountering sand and sandy shale between 2249 and 2300 ft, the section between 2258-77 ft being green sand. The hole was plugged back to 2300 ft, 7-in casing set at 2245 ft, where the well showed about 5 bbls of 44 gravity oil. It is deepening to the Edwards lime if production is not found shallower. Topped Midway at 1400 ft, Navarro 1704 ft and Litiola Taylorensis 2230. Had serpentine 2840-3340 ft, but did not make commercial producer.

POTEET*

Centering around J. T. Russell Survey No. 122, 3 mi n Poteet. **Means of Discovery:** Magnetic survey and geological study. **Extent of Development:** R. C. Lee, Trustee (Atascosa Trust), drilled U. A. Doumch to 3985 ft, after topping Edwards lime at 3930 ft. Failed to develop production at this level and was plugged back to Austin chalk which showed some oil. Chalk topped at 3503 ft, 7-in casing set at 3460 ft, elev 540 ft, derrick floor.

SEITZ*

Crus Laden Survey No. 45. **Means of Discovery:** Geological data indicated considerable faulting. **Extent of Development:** O. W. Killam's O. K. Seitz 1, July 15, 1933, showed Serpentine 3512-3624 ft, set 5⅝-in casing 3530 ft, test 3,000,000 cu ft gas, little oil, total depth 3640 ft, but water broke in from above, drilled to 4065 ft and abd. Top Edwards lime 4037 ft. **Principal Leaseholder:** O. W. Killam.

*Prospect. †Salt dome, no production. ‡Gas field.

BASTROP COUNTY

CARROLL

Andrew Mayes Survey No. 19, 10 mi sw Bastrop. **Means of Discovery:** Geophysical and geological survey. **Discovery Data:** Sun Oil Co. and Parson & Mayfield's J. H. Carroll 1, completed Aug. 28, 1932, pumping 75 bbls 36 gravity oil, 2378 ft, top serpentine 2245 ft, soft serpentine 2300 ft, oil in last 2 ft. **Geological Data:** Igneous plug cut by ne-sw faulting. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 4 wells; 2 oil, 2 failures. (During 6 months, 1936) 1 failure. **Deepest Hole:** Sun Oil Co.'s Page Probst 1; abd 2919 ft Feb. 15, 1933. **Daily Production Aug. 1, 1936:** 25 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 96,000 bbls ultimate from proven area; 27,678 bbls recovered to Jan. 1, 1936; 2135 bbls first 6 months 1936. **Principal Leaseholders:** Sun Oil Co., Parsons & Mayfield, Nelson Pruett.

CEDAR CREEK

R. Gage, A. Navarro and Addison Litton Surveys, 4 mi e Cedar Creek. **Means of Discovery:** Geophysics. **Discovery Data:** Marts & Beavans' Amanda Reyes 2, June 1, 1933, flowing 175 bbls of 34.2 gravity oil, 1707 ft; top serpentine 1695 ft; elev 501 ft. **Geological Data:** Serpentine plug, oval shape, axis ne-sw. **Producing Horizon:** Serpentine, or igneous rock, Cretaceous age. **Producing Area:** 170 acres. **Extent of Development:** (to Jan. 1, 1936) 31 wells; 17 oil, 14 failures. (During 6 months, 1936) none. **Daily Production, Sept. 1, 1936:** 85 bbls. **Rigs Running Sept. 1, 1936:** None. **Market Outlet:** Bastrop County Pipe Line Co. has line to Dale, where oil is delivered to Magnolia Pipe Line Co. **Reserve Data:** 548,000 bbls ultimate from proven area; 172,997 bbls recovered to Jan. 1, 1936; 10,421 bbls recovered first 6 months 1936. **Principal Leaseholders:** Cole Petroleum Co., Joe Mills, Marts & Beavans, Adams & Lyles. **Remarks:** Joe Mills et al's H. Litton 1, completed August 11, 1934, flowed 346 bbls 34.8 gravity oil per day from serpentine, 1507-1630 ft; 5 3/16-in casing at 1490 ft. Well is located nearly mile northwest Cedar Creek field and referred to by some as separate plug.

HILBIG

S. Wolfenberger and A. Mayes Surveys, 7 mi s Bastrop. **Means of Discovery:** Magnetometer. **Discovery Data:** Humble Oil & Refining Co.'s Annie Hassler 1, Feb. 15, 1933, flowing 1872 bbls 37.1 gravity oil, 1-in choke, 350 lbs tubing, 500 lbs casing pressure. Producing horizon 2468-2577 ft. **Geological Data:** Domal type structure (plug). Presence of fault. **Producing Horizon:** Serpentine, Cretaceous age. **Producing Area:** 260 acres. **Extent of Development:** (To Jan. 1, 1936) 19 wells; 14 oil; 5 failures. (During 6 months, 1936) none. **Deepest Hole:** Humble's P. Wolfenberger 2, abd 2683 ft, 1933. **Daily Production, Aug. 1, 1936:** 714 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Humble. **Reserve Data:** 2,210,000 bbls ultimate from proven area; 798,412 bbls recovered to Jan. 1, 1936; 147,695 bbls recovered first 6 months 1936. **Principal Leaseholder:** Humble. **Remarks:** Pressure maintenance plant in operation.

NORTH DALE

John Maximilian, Joshua Gray Surveys, 6 mi n Dale. **Means of Discovery:** Geological information, surface fault; north extension to pool result of geophysical work. **Discovery Data:** Ogden & Reed Oil Co.'s C. L. Riddle (94½-ac tract) 1, completed Sept. 4, 1932, pumping 100 bbls 38 gravity oil per day, 2223 ft; producing horizon 2164-2223 ft; 6⅝-in casing 2164; elev 440 ft. **Geological Data:** Producing an upthrow side of fault running ne and sw. **Producing Horizon:** Dale lime, eroded serpentine and broken Taylor. No solid serpentine. Dale lime is local name. **Producing Area:** 320 acres. **Extent of Development:** (to Jan. 1, 1936) 31 wells, 17 oil, 14 failures. (During 6 months, 1936) 1 failure. **Daily Production, Aug. 1, 1936:** 225 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Magnolia Pipe Line Co. **Reserve Data:** 782,000 bbls ultimate from proven area; 361,530 bbls recovered to Jan. 1, 1936; 35,378 bbls recovered first 6 months 1936. **Principal Leaseholders:** Ogden & Reed Oil Co., Marts & Beavans, Chiquita Oil Co. **Remarks:** Acidation work has been fairly successful.

SCHIMMEL-BATTS

James Doyle Survey, 6 mi n Lytton Springs. **Means of Discovery:** Geological information, surface indications. **Discovery Data:** Schimmel Batts' Williams 1; completed May 15, 1931; pumping 6 bbls 25 gravity oil per day, 1977 ft; producing horizon top serpentine 1373 ft; topped chalk 1977 ft; 6⅝-in casing set 1384 ft. **Geological Data:** Small igneous plug. **Producing Horizon:** Ser-

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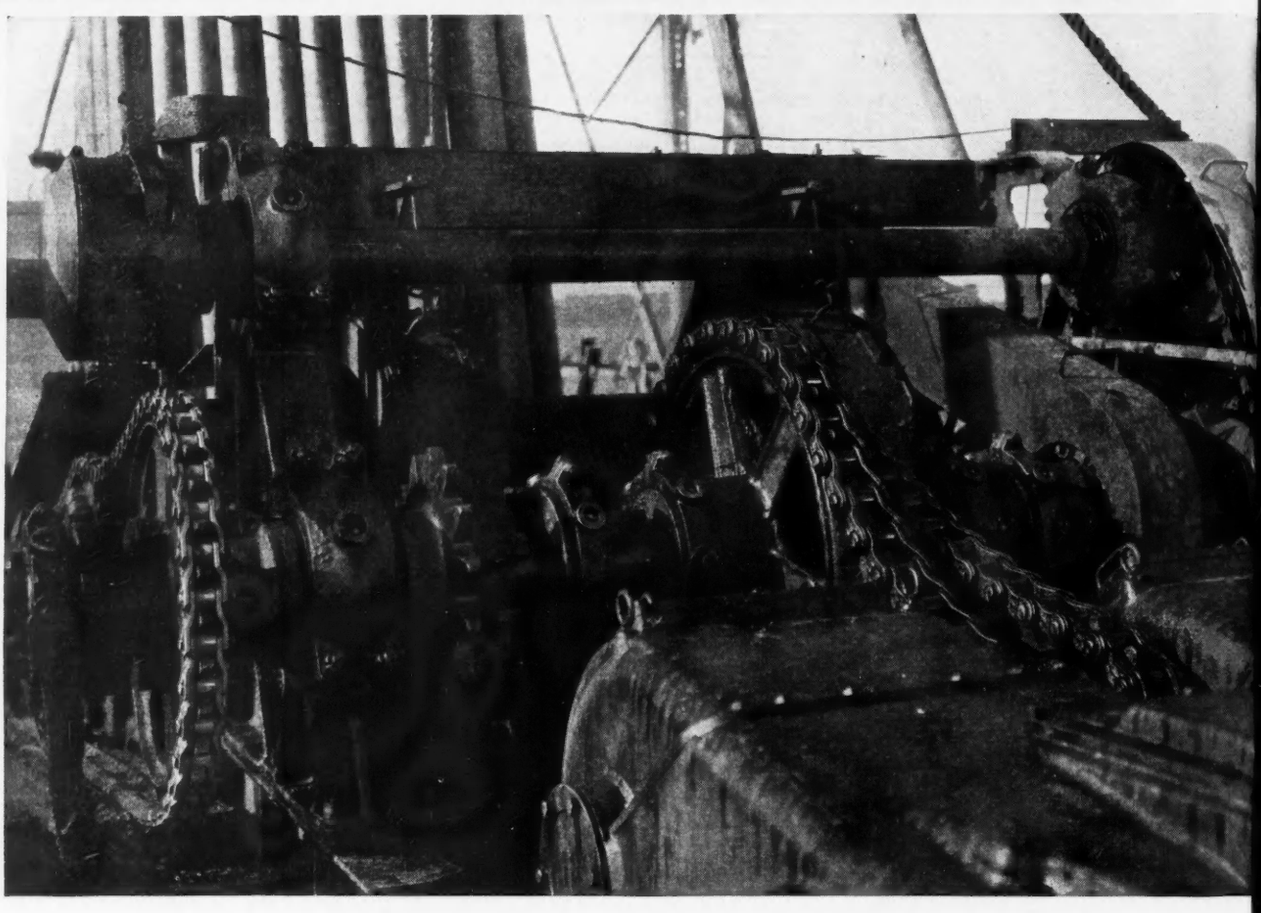

Down at Corpus

ABOVE: A new heavy-duty rig equipped 100% with Link-Belt Hyper rotary chain, a common sight on rigs drilling the deep Corpus Christi area wells.

A Survey of This Busy Area Shows That of the 80 Rigs Running (August 10) a Majority Were Using Link-Belt Chains.

● Preference for Link-Belt rotary chains is readily evident in the Corpus Christi area, down in South Texas; one of the industry's most recent "hot spots" of drilling activity. Of the 80 rigs running (Aug. 10) a check shows a majority of them were equipped with Link-Belt chains. The illustration shows a rig of a prominent drilling contractor in the Corpus area. He's using Link-Belt Hyper to drill the 5800′ pay, and Link-Belt Red-Hed on the 4800′ holes, or less.

This contractor, like hundreds of others, knows he can depend on Link-Belt chain; knows there's a type to fit his drilling problem, depth or formation notwithstanding. Operators in this zone of gas-impregnated sands know drilling here is a ticklish proposition. They're taking every precaution, including the selection of good equipment. More than 50% of them are using Link-Belt chain.

Address Link-Belt Company, Indianapolis, Philadelphia, Los Angeles, New York, Houston, Dallas or Oklahoma City (W. H. Abele, Box 305, Route 4). 5824

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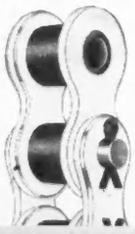
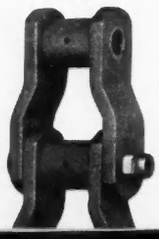


SS-40 (API-3) RotaryChain.28,000lbs. ultimate strength

SS-40+ Red-Hed (API-3) Rotary Chain. 48,000 lbs. ultimate strength

SS-40Hyper(API-3) RotaryChain.75,000 lbs. ultimate strength

SS-124 (API-4) RotaryChain.60,000 lbs. ultimate strength



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SS-124, 2-Bar Hyper (API-4)Rotary Chain. 130,000 lbs. ultimate strength

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"We Saved 65% in the Cost of Mud and Kept it Clean with this LINK-BELT Vibrating Screen"

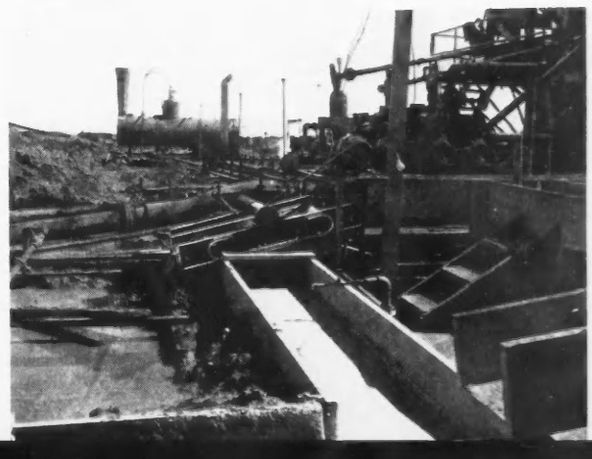
● Due to hazardous gas pressures in the Corpus Christi territory, one of the most active areas in the industry today, an average of 800 to 900 sacks of commercial mud is used per well.

But the major contractors on Isensell No. 5 well for Southern Minerals, Inc., in Clarkwood field, "hot spot" of this area, used only 270 sacks and kept a mud weight of around 10.1 pounds with a viscosity ranging from 28 to 30. They completed a good well with the hole in excellent condition, and handled the job without trouble or lost time.

The outstanding contributing factor to this remarkable job is evident in the photographs—the first LINK-BELT VIBRATING SCREEN installed in this field. Note the undesirable material (shale, shell, sand and small rocks) removed from the circulating mud by the screen, which kept drilling fluid at a smooth, even texture all the way down. And it handled the volume of a 7¼" x 18" slush pump, running 60 strokes per minute. This screen is now operating on a follow-up location at Clarkwood, and the same fine results are being accomplished.

●

Other operators in this high gas zone can have the same results with one of these money-saving, trouble-saving machines which pay for themselves over and over again. Folder No. 1672, available upon request. Address Link-Belt Company, Philadelphia, Los Angeles, New York, Houston, Dallas, or Oklahoma City (W. H. Abele, Box 305, Route 4).



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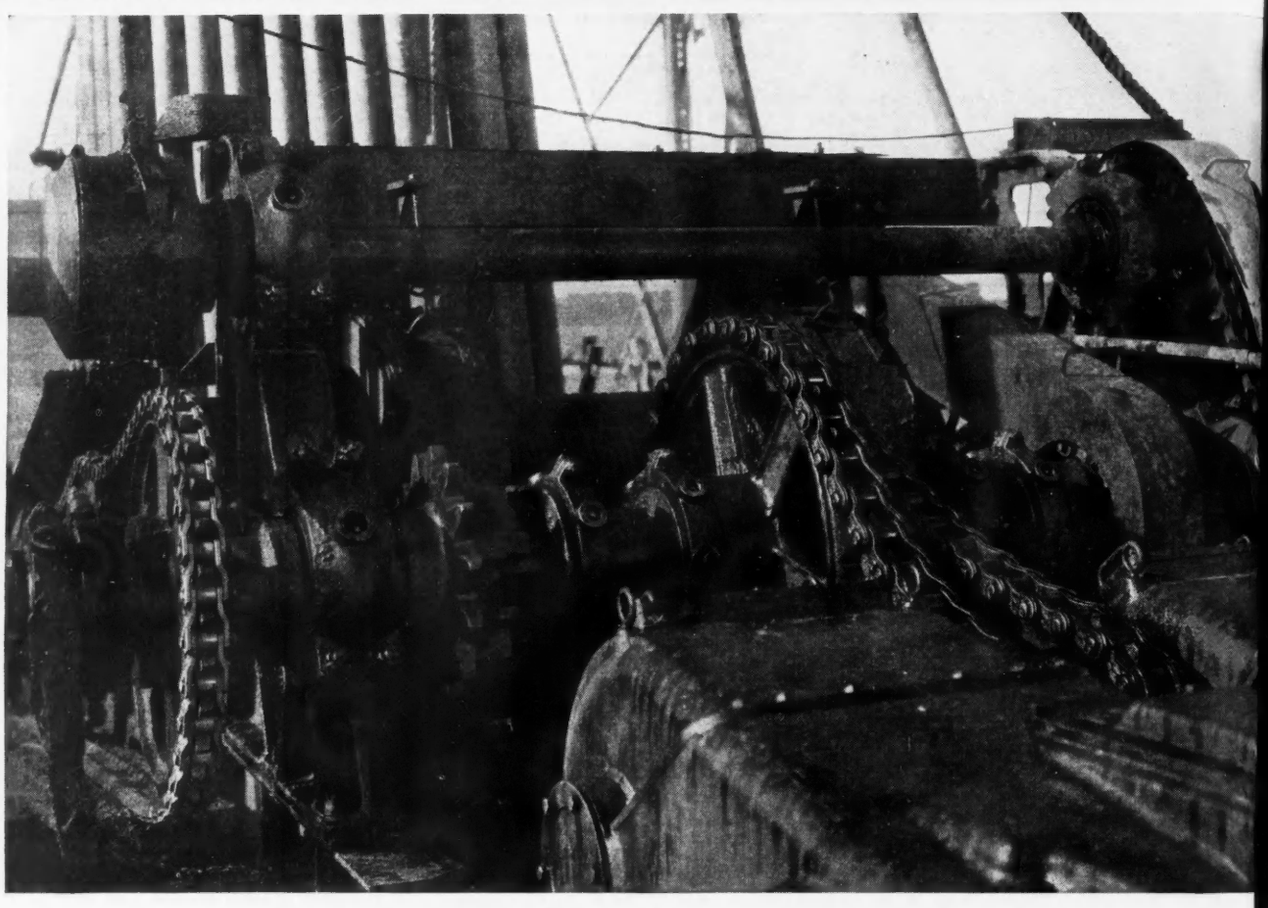

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pentine. **Producing Area:** 30 acres. **Extent of Development:** (to Jan. 1, 1936) 6 wells; 3 oil wells; 3 failures. (During 6 months 1936) None. **Deepest Hole:** Discovery well. **Daily Production, Aug. 1, 1936:** Shut in. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Pitzer-West and Boone pipe line to Dale. **Reserve Data:** 15,000 bbls ultimate from proven area; 5624 bbls recovered to Jan. 1, 1936; 509 bbls recovered first 6 months 1936. **Principal Leaseholders:** Schimmel & Batts, Texas Petroleum Co.

SERPENTINE*

Well scattered through western portion of county, note map. **Means of Discovery:** Mainly on magnetometer surveys. **Extent of Development:** Not less than 35 wildcats have been drilled on magnetometer structures during the past 3 years, the majority finding serpentine, but in many cases, hard and dry. These prospects are not being treated individually due to their similarity. The usual method of hunting these plugs is to work the area with magnetometer and drill on the flank of the structure. Several wells may be required to find the soft, porous, saturated section of the plug. **Principal Leaseholders:** The majority of the leaseholders are independents, although some acreage is held by major companies.

YOST

A. Garcia Survey, 14 mi sw Bastrop. **Means of Discovery:** Geological information. **Discovery Data:** Cranfill-Reynolds and A. M. Loomis' A. M. Yost 1, completed Nov. 4, 1928, flowing 400 bbls 25.2 gravity oil per day, 1598 ft; producing horizon 1480-1548 ft, elev 500 ft. **Geological Data:** Igneous plug cut by ne-sw fault. **Producing Horizon:** Serpentine. **Producing Area:** 150 acres. **Extent of Development:** (to Jan. 1, 1936) 32 wells; 25 oil, 7 failures. (During 6 months 1936) none. **Deepest Hole:** Cranfill-Reynolds' A. M. Yost 6, abd 2080 ft Feb. 2, 1936. **Daily Production, Aug. 1, 1936:** 52 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Pitzer, West & Boone line to Dale connects with Magnolia Pipe Line Co. **Reserve Data:** 1,100,000 bbls ultimate from proven area; 860,445 bbls recovered to Jan. 1, 1936; 8272 bbls recovered first 6 months 1936. **Principal Leaseholders:** Atlantic Oil Producing Co., Cranfill-Reynolds, Gulf Oil Corp., Trinity Drillers, Inc., Trapshooter Reilly; Pitzer, West & Boone.

BEE COUNTY

BEEVILLE

J. Ryan Survey, 3½ mi s Beeville. **Means of Discovery:** Geological-geophysical prospect; development prior to discovery. **Discovery Data:** George M. Church's J. C. Woods 1, Sept. 22, 1935, initial production 20,000,000 cu ft gas, spraying 61 bbls 61.7 gravity oil per day; ¼-in choke; 1550 lbs tubing, 1800 lbs casing pressure; total depth 5831 ft; producing horizon 5810-31 ft; elev 177 ft, derrick floor. **Geological Data:** Fold against fault. **Producing Horizon:** Conroe sand in Yegua. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well. (During 6 months 1936) 1 failure. **Deepest Hole:** Marine Oil Co.'s (was G. M. Church), Webb-Hearn 1, abd 5936 ft; showed salt water, distillate and gas, April 25, 1936. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, August 1, 1936:** One. **Market Outlet:** Trucks. **Reserve Data:** 15,000 bbls ultimate from proven area; 451 bbls distillate recovered to Jan. 1, 1936; 250 bbls recovered first 6 months 1936. **Principal Leaseholders:** George M. Church, Marine Oil Co., Lonnie Glasscock, Houston Oil Co., Magnolia Petroleum Co. **Remarks:** Primarily a gas field.

CAESAR

Franklin Lewis, Wm. F. Hodge, P. B. McEarly Surveys, extending nw-sw of Caesar. **Means of Discovery:** Geological information, drilling on strike with wildcat showing gas and oil. **Discovery Data:** Caesar Oil Co.'s C. E. Pullin 1-A, May 14, 1934, initial production 20,000,000 cu ft gas spraying small quantity 32.2 gravity oil per day; ¼-in choke; 1150 lbs tubing, 1300 lbs casing pressure; total depth 3034 ft; producing horizon 3007-34 ft; elev 433 ft. **Geological Data:** Narrow fold against ne-sw fault, oil on steep flank of structure, large gas zone at crown of fold. **Producing Horizon:** Pettus of upper Cockfield, Jackson age. **Producing Area:** 620 acres. **Extent of Development:** (to Jan. 1, 1936) 43 wells; 28 oil, 7 gas, 9 failures. (During 6 months 1936) 6 wells, 3 oil, 3 failures. **Deepest Hole:** Houston Oil Co.'s Miller 1, 3404 ft; plugged back and perforated about 3020 ft, completed as gasser June 10, 1934. **Daily Production, August 1, 1936:** 775 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Falcon Pipe Line Co., Logco Pipe Line Co. **Reserve Data:** 2,975,000 bbls ultimate from proven area; 298,888 bbls recovered to Jan. 1, 1936; 181,753 bbls recovered first 6 months 1936. **Principal Leaseholders:** Caesar Oil Co., El Toro Oil Co., Firm Oil Co., Luling Oil & Gas Co., McAlester Fuel Co., R. B. Swiger et al, Sun Oil Co.

COPELAND*

Obed Marshall Survey, 3½ mi nw Pettus. **Means of Discovery:** Geological information based on dry holes in area; drilling along trend fault. **Extent of Development:** 3 failures drilled to Pettus sand prior to Jan. 1, 1936; 2 failures drilled this year; Severy et al's J. E. Copeland 1 showed 350 lbs gas pressure on drill-stem 3420-71 ft, plugged back, set 7-in casing 3523 ft and perforated 3465-71 ft, resulting in salt water; Eden Oil Co.'s J. E. Copeland 1 abd 3596 ft. **Principal Leaseholders:** Eden Oil Co., Severy et al, Fred Haworth, Jr.

COSDEN

John Pace, George Kerr Surveys, 1 mi w Pettus. **Means of Discovery:** Geological information, attempt to extend Pettus field west. **Discovery Data:** Cosden Oil Co.'s McKinney 1, June 1, 1930, flowing 270 bbls 47.5 gravity oil and 500,000 cu ft gas; 400 lbs casing pressure; total depth 3677 ft; 6⅝-in casing set 3654 ft; sand 3659-77 ft; elev 392 ft. **Geological Data:** Faulting and folding; small producing structure. **Producing Horizon:** Cockfield sands of Jackson series (Pettus). **Producing Area:** 180 acres; 85 acres oil. **Extent of Development:** (to Jan. 1, 1936) 18 wells, 10 oil, 3 gas, 5 failures. (During 6 months 1936) none. **Deepest Hole:** Rowan & Tong's J. M. Freeland 1; abd 4536 ft. **Daily Production, Aug. 1, 1936:** Included in Pettus. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** Included in Pettus. **Principal Leaseholders:** Barnsdall Oil Co., Sun Oil Co., Cosden Oil Co., Batex Oil Co., Houston Oil Co. **Remarks:** No production developed in Yegua or deeper horizons, but these horizons offer possibilities.

DIRKS

Section 7, J. M. Uranga Grant, G. B. Young, T. J. Butler, M. O'Brien, J. W. Young, T. P. Rolling, J. L. Dugat Surveys, 5 mi sw Pettus. **Means of Discovery:** Geological, a trend play. **Means of Discovery:** Dirks Bros.' J. E. Roth 1, Dec. 23, 1934, flowing 286 bbls oil; ¼-in choke; 225 lbs tubing, 550 lbs casing pressure; total depth 3884 ft; producing horizon 3882-84 ft. **Geological Data:** Sand lensing and folding trending ne-sw. **Producing Horizon:** Sand is Pettus of Cockfield, Jackson age. **Producing Area:** 820 acres. **Extent of Development:** (to Jan. 1, 1936) 81 wells, 74 oil, 7 failures. (During 6 month 1936) 32 wells, 30 oil, 2 failures. **Deepest Hole:** Mills Bennett's Rapp 3, abd 4776 ft in Yegua, Oct. 4, 1935. **Daily Production Aug. 1, 1936:** 4835 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Atlantic Pipe Line Co., Pettus Refining Co. **Reserve Data:** 8,077,000 bbls ultimate from proven area; 619,808 bbls recovered to Jan. 1, 1936; 920,972 bbls recovered first 6 months 1936. **Principal Leaseholders:** Dirks-McMurray, Heyser-Head & Walton, Howe Co., Inc., Humble Oil & Refining Co., Mills Bennett Prod. Co., Illinois Petroleum Co., Sun Oil Co., Devonian Oil Co., The Texas Co.

DASH*

Butler subdivision of J. M. Thurston Survey, 2 mi sw Burnell. **Means of Discovery:** Geological information, subsurface correlations and surface indications; shallow gas wells. **Extent of Development:** Dash Production Co.'s B. B. Ruhman 1, Dec. 21, 1933, in the upper Cockfield of Jackson series, about same place in section as upper portion of Pettus sand. Initial production 10,000,000 cu ft gas per day and 35 bbls 35 gravity oil, 5/16-in choke; total depth 3202 ft; 850 lbs tubing, 990 lbs casing pressure; sand 3176-3195 ft; pressure increased and oil flow was cut to practically nothing. Luling Oil & Gas Co.'s B. B. Ruhman 1-D, abd 3460 ft, Jan. 21, 1936.

FOLEY‡

Keeler Survey, 4½ mi w Normanna. **Means of Discovery:** Geological prospect. **Discovery Data:** Dirks Bros.' Foley 1, Feb. 8, 1935, initial production 25,000,000 cu ft gas spraying distillate, ¼-in choke; 1000 lbs tubing, 1250 lbs casing pressure; total depth 3445 ft; producing horizon 3404-45 ft; elev 415 ft. **Geological Data.** Closure against fault. **Producing Horizon:** Hockleyensis of Jackson age. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 2 wells, 1 gas, 1 failure. (During 6 months 1936) None. **Deepest Hole:** Fox-Heflin's A. M. Holzmark 1, abd 4146 ft in Yegua. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Small pipe line to Dirks area where gas is purchased for drilling rigs. **Principal Leaseholders:** Dirks Bros., Grady Kirby, Fox-Heflin, The Texas Co.

GEORGE RAY RANCH*

In Bee and Goliad Counties, centering around W. A. Moore, G. Neil, J. Gomez, E. Ray, AB&M, G. A. Ray and P. G. Millikin Surveys, on both sides of Blanco Creek, 2 mi e Pettus field. **Means of Discovery:** Trend drilling with original Pettus gas field and showings in various wells. **Extent of Development:** 11 wells have been drilled. Dr. Hewitt et al's G. A. Ray abd 4375 ft with shows. Union Producing Co.'s G. A. Ray 3, drilled in 1929, really discovery well of field, finding small production in the Pettus around 4000 ft and deepening to below 6000 ft. It produced for awhile, was reworked, but abd. Union Producing Co. (later United Production Corp.) drilled 10 tests in the area, finding oil, gas or salt water with shows of oil and gas in every test. G. A. Ray 11 blew out June 23, 1930, at 3812 ft, ran wild and wrecked derrick and rig. It made only dry gas. **Principal Leaseholder:** United Production Corp.

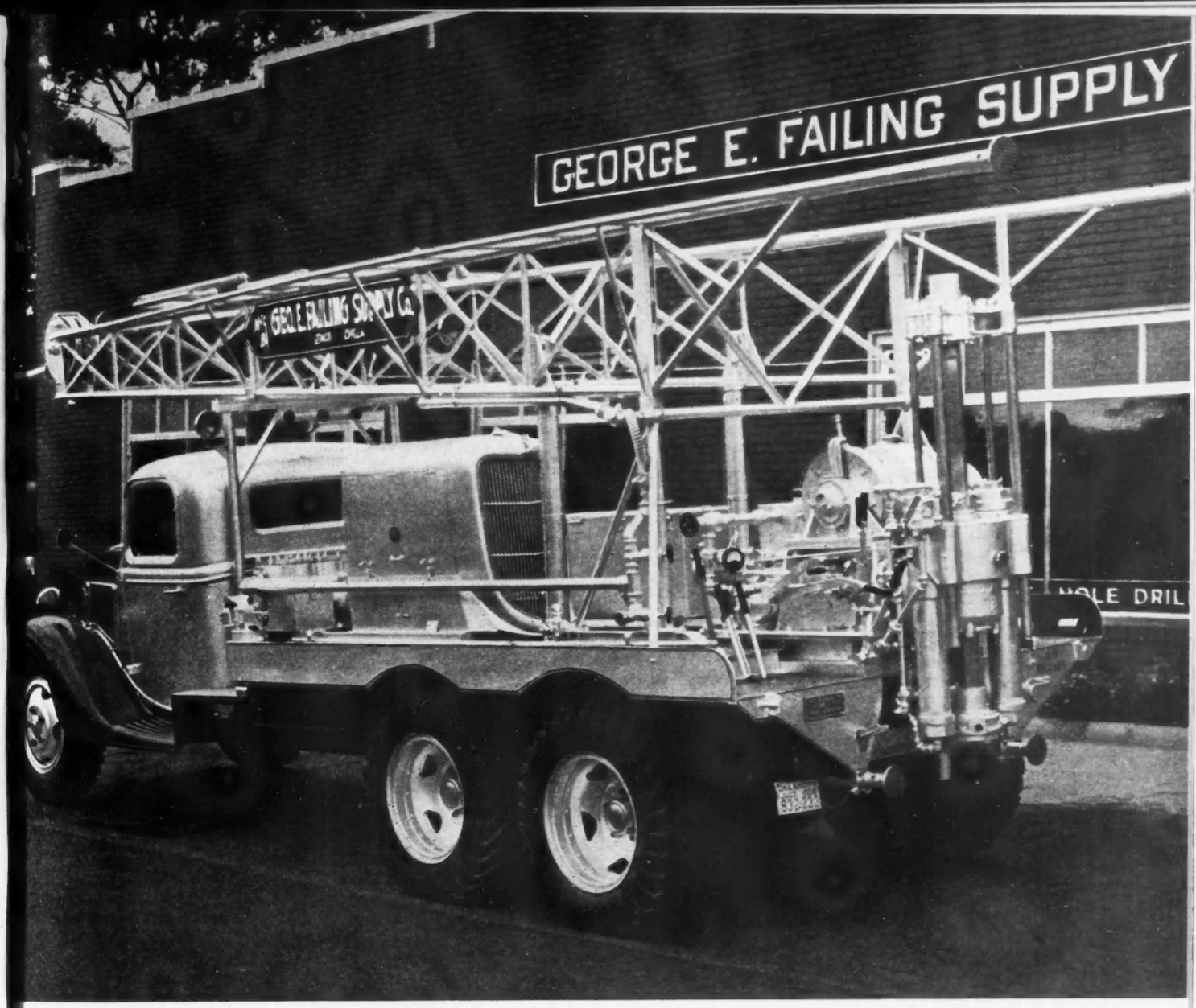
GRAYBURG

Centering around Stephen Winship Survey, 1 mi n Mineral. **Means of Discovery:** Geological information, evidence of faulting. **Discovery Data:** Grayburg Oil Co.'s A. J. Kimball 1, June 19, 1930, 200 bbls 34.6 gravity oil per day; 3553 ft; elev 370 ft; (made salt water shortly after completed and abd). **Geological Data:** Small structure cut by several faults. **Producing Horizon:** Pettus of Cockfield Jackson age. **Producing Area:** 50 acres. **Extent of Development:** (to Jan. 1, 1936) 18 wells, 3 oil, 15 failures. (During 6 months 1936) none. **Deepest hole:** Grayburg's A. C. Billingsly 1, abn 4800 ft. **Daily Production Aug. 1, 1936:** 10 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Truck. **Reserve Data:** 20,000 bbls ultimate from proven area; 13,799 bbls recovered to Jan. 1, 1936; 200 bbls recovered first 6 months 1936. **Principal Leaseholders:** Majority of acreage open; Worth Oil Co., Mid-Continent Crude Oil Co.

HICKS‡

J. M. Uranga Grant, 4½ mi nw Normanna. **Means of Discovery:** Trend play and geophysical information. **Discovery Data:** H. A. Pressy et al's R. T. Hicks 1, completed July 27, 1936; 450 lbs rock pressure; total depth 3568 ft; producing horizon 3482-3502 ft; set 5-in casing on bottom, perforated 3482-87 ft completed, 10,000,000 cu ft gas; elev 340 ft, derrick floor. **Geological Data:** Closure against fault. **Producing Horizon:** Hockleyensis, Jackson age. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) no wells completed. (During 6 months 1936) no wells

*Prospect. †Salt dome, no production. ‡Gas field.



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completed. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** None. Principal Leaseholders: Magnolia Petroleum Co., Continental Oil Co., Tide Water Oil Co., Humble Oil & Refining Co., H. A. Pressy.

HOLZMARK‡

James A. York and Lyford Surveys, 4 mi sw Normanna. **Means of Discovery:** Geological information. **Discovery Data:** Simms Oil Co.'s Holzmark 1, completed Sept. 7, 1930, initial production 50,000,000 cu ft wet gas; 1600 lbs rock pressure; 900 lbs working pressure on open 4-in line; total depth 3552 ft; sand 3535-48 ft; shale 48-52 ft. **Geological Data:** Lensing and folding. **Producing Horizon:** Upper portion of Hockleyensis in Jackson series, top Hockleyensis 3498 ft. **Producing Area:** 25 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 2 gas, 3 failures. (During 6 months 1936) None. **Deepest Hole:** Simms Oil Co.'s Holzmark 2, total depth 4458 ft; plugged back 3512 ft and completed as gasser. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholder:** Simms Oil Co.

MORGAN RANCH*

J. Brown and Henry Eyles Surveys, 10 mi se Beeville. **Means of Discovery:** Considerable geological and geophysical work has been done in this general territory, information obtained from both sources indicate several highs. **Extent of Development:** Phillips Petroleum Co., Moody-Seagraves and Independent Oil & Gas Co. drilled several 6000-ft tests in the general area, but failed to develop production, although interesting showings were encountered. Independent and Moody-Seagraves well on Welder land had oil sand at 4360-66 ft. Well was near center of Eyles Survey. Top of Fayette about 4450 ft, top Hockleyensis just below 5000 ft. Phillips Petroleum Co.'s T. P. Morgan 1, abd 6697 ft, Dec. 1, 1934, had several oil shows.

NORMANNA

Central portion J. M. Uranga grant, 1 mi sw Normanna. **Means of Discovery:** Geological information. Topographical high and other surface indications. **Discovery Data:** C. F. Nichols' Hicks Hahl 2, completed Dec. 10, 1929; 1,500,000 cu ft dry gas, 1920 ft. C. F. Nichols' Hicks-Hahl 3, completed June 15, 1930; 20,000,000 cu ft gas, spraying 50 bbls 60 gravity oil; 7/16-in choke; total depth 3647 ft; sand 3615-41 ft; decline in gas output caused gravity to drop, now 38.5 degrees. **Geological Data:** Structure of limited area, cut by faulting and steep dipping. **Producing Horizon:** Gas from Frio; oil from Hockleyensis. **Producing Area:** 80 acres; 40 acres oil. **Extent of Development:** (to Jan. 1, 1936) 13 wells, 4 oil, 2 gas, 7 failures. (During 6 months 1936) none. **Deepest Hole:** W. F. Morgan's W. L. Demory 1, abd 5050 ft, Jan. 6, 1934. **Daily Production Aug. 1, 1936:** 12 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** 62,000 bbls ultimate from proven area; 35,370 bbls recovered to Jan. 1, 1936; 1806 bbls recovered first 6 months 1936. **Principal Leaseholders:** Nichols & Dougherty, Morgan & Dougherty, The Texas Co.

PETTUS

Pierce Miller, Thomas Hanson, L. C. Randolph, G. A. Kerr Surveys, including Pettus townsite and area ne. **Means of Discovery:** Geological information led to completion of gas wells. Oil wells followed after shallow gas indicated structural high. **Discovery Data:** Mission Drilling Co.'s George A. Ray 2, completed April 30, 1929 ; 20,000,000 cu ft gas, total depth 2902 ft; producing horizon 2815-2902 ft; elev 382 ft. Houston Oil Co.'s Maggie McKinney 1 (later Humble Oil & Refining Co.); completed Feb. 1, 1930; initial production 525 bbls 45 gravity oil per day; 5/16-in choke; 500 lbs tubing pressure; total depth 3971 ft; producing horizon 3957-71 ft. **Geological Data:** Sand lensing body backed up against several subsurface faults. Sand up to 30 ft thick in portions of field. **Producing Horizon:** Top Gueydan about minus 1175 ft; Jackson minus 2460 ft; gas from top of Whitsett in top of Jackson series; oil from upper Cockfield. **Producing Area:** 850 acres; 510 acres oil. **Extent of Development:** (to Jan. 1, 1936) 70 wells, 48 oil, 11 gas, 11 failures. (During 6 months 1936) 2 wells, 1 oil, 1 failure. **Deepest Hole:** United Production Corp.'s G. A. Ray 39; total depth 7569 ft; plugged back 3936 ft; completed as oil producer Dec. 28, 1932. **Daily Production Aug. 1, 1936:** 1460 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Houston Oil Co., Humble Pipe Line Co., Atlantic Pipe Line Co., local refineries. **Reserve Data:** 9,850,000 bbls ultimate from proven area; 7,534,651 bbls recovered to Jan. 1, 1936; 241,261 bbls recovered first 6 months 1936. **Principal Leaseholders:** Houston Oil Co., Humble Oil & Refining Co., United Production Corp., S. R. & C. Oil Corp., Glasscock Brothers. **Remarks:** Daily production and reserve data based on Pettus, Southwest Pettus and Cosden, with total of 705 acres.

PLUMMER‡

Section 33, Plummer subdivision, Chessman Survey, 5 mi sw Caesar. **Means of Discovery:** Trend drilling, geological data. **Discovery Data:** J. P. Hynes et al's Theo. M. Plummer 1-A, completed Aug. 31, 1935; 20,000,000 cu ft gas, ¼-in choke; 1225 bbls tubing, 1225 lbs casing pressure; total depth 2988 ft; producing horizon 2975-88 ft; elev 356 ft derrick floor. **Geological Data:** Closure against fault. **Producing Horizon:** Pettus, Cockfield of Jackson age. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 2 wells, 1 gas, 1 failure. (During 6 months 1936) 2 failures. **Deepest Hole:** D. C. Smith's W. A. Robertson 1, abd Jan. 3, 1936, 3059 ft, Pettus sand 3051-59 ft showed oil, gas and salt water; elev 393 ft, derrick floor. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Shut in. **Reserve Data:** Gas field. **Principal Leaseholders:** D. C. Smith, Chas, A. Daubert, F. P. Hynes, The California Co., Magnolia Petroleum Co., Melville et al, D. R. Semmes.

*Prospect. †Salt dome, no production. ‡Gas field.

RAY

W. B. Blanchard, Brooks & Burleson Surveys, Section 21 of J. M. Uranga grant, 8 mi sw Pettus. **Means of Discovery:** Trend drilling. **Discovery Data:** Jamison & Byron et al's P. L. Campbell 1, completed March 29, 1935, flowing 201 bbls oil; 3/16-in choke; 460 lbs tubing, 570 lbs casing pressure; total depth 3960 ft; producing horizon 3956-60 ft; elev 342 ft derrick floor. **Geological Data:** Closure against faulting, trending ne-sw. **Producing Horizon:** Pettus of upper Cockfield. Top Hockleyensis 3348 ft. **Producing Area:** 480 acres. **Extent of Development:** (to Jan. 1, 1936) 41 wells, 37 oil, 3 failures. (During 6 months 1936) 7 wells, 5 oil, 2 failures. **Deepest Hole:** Rawlins et al's P. L. Campbell 1, abd 4525 ft. **Daily Production Aug. 1, 1936:** 1775 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlet:** Atlantic Pipe Line Co. **Reserve Data:** 3,840,000 bbls ultimate from proven area; 296,777 bbls recovered to Jan. 1, 1936; 322,148 bbls recovered first 6 months 1936. **Principal Leaseholders:** Simms Oil Co., Stanolind Oil & Gas Co., Highland Oil Co., The California Co., Dirks Bros., Jamison & Byron, Magnolia Petroleum Co., L. L. Moore.

RUTLEDGE

B. Q. Hadley Survey, abstract 201, 2 mi ne Mineral. **Means of Discovery:** Trend drilling, geological data. **Discovery Data:** Worth Oil Co.'s Rutledge 1-A, completed May 1, 1935, flowing 90 bbls 33.2 gravity oil; 5/16-in choke; 1150 lbs tubing, 1240 lbs casing pressure; total depth 3394 ft; producing horizon 3386-94 ft; elev 390 ft derrick floor. **Geological Data:** Small sand lens against fault. **Producing Horizon:** Pettus sand of Cockfield. **Producing Area:** 15 acres. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 2 oil, 9 failures. (During 6 months 1936) none. **Deepest Hole:** L. W. Stieren's W. N. Fox 1, abd 3585 ft in Yegua. **Daily Production Aug. 1, 1936:** 40 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Truck oil to local markets. Falcon Pipe Line Co. **Reserve Data:** 67,500 bbls ultimate from proven area; 9063 bbls recovered to Jan. 1, 1936; 2839 bbls recovered first 6 months 1936. **Principal Leaseholders:** Worth Oil Co., Sun Oil Co., Stanolind Oil & Gas Co., Humble Oil & Refining Co., L. W. Stieren.

SOUTHWEST PETTUS

John W. Williamson, John Pace, George Kerr and A. Smalley Surveys, 1 mi sw Pettus. **Means of Discovery:** Geological information. **Discovery Data:** J. M. Davis et al's George A. Ray 1, completed July 18, 1931, flowing 380 barrels 45 gravity oil, ¼-in choke; 50 lbs tubing, 250 lbs casing pressure; total depth 3925 ft; producing horizon 3920-25 ft; elev 327 ft; 6⅝-in casing set 3919 ft. **Geological Data:** Sand lensing structure, similar to main Pettus field; faulting however, definitely divides two areas. **Producing Horizon:** Upper Cockfield from Jackson series, locally called Pettus sand. **Producing Area:** 160 acres. **Extent of Development:** (to Jan. 1, 1936) 26 wells, 19 oil, 7 failures. (During 6 months 1936) none. **Deepest Hole:** H. H. Weinert and C. R. & M. Drilling Co.'s George Ray 1, abd 4527 ft, 1931. **Daily Production Aug. 1, 1936:** Included in Pettus. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Local refineries, Humble Pipe Line Co., Atlantic Pipe Line Co. **Reserve Data:** Included in Pettus. **Principal Leaseholders:** Houston Oil Co., J. L. Maudlin, Slick-Urschel, Inc., Buck Oil Corp., The Texas Co., Damac Oil Corp.

THOMPSON RANCH*

Wm. Burk, Garrett Roach, M. de los Santos Surveys, 12 mi e Skidmore. **Means of Discovery:** Likely a geophysical prospect in as much as considerable work was done in this immediate area, and big block taken by Humble Oil & Refining Co. **Extent of Development:** 4 wells drilled. Humble and Hulburt's Chestnut 1 abd in 1930 at 5008 ft. Humble's Thompson 1 was drilled later to 6160 ft and abd. Humble's Thompson 2 abd June 25, 1935 at 5987 ft. It had gas and oil sand 3984-4008 ft but showed salt water and 65 lbs on drill-stem test. Another drill-stem test at 4850-84 ft showed 300 ft oil and salt water and 350 lbs pressure. Heavy gas show at 5354-5405 ft. Humble's J. C. Wood 1, abd 5128 ft, July 16, 1935.

TULETA

Sections 2, 3, 12, and 13, J. M. Uranga grant, 1 mi e Tuleta. **Means of Discovery:** Geological information. **Discovery Data:** C. F. Nichols' J. P. Harris 1, completed July 21, 1932, flowing 450 bbls 45.5 gravity oil; ⅝-in choke; 425 lbs tubing, 825 lbs casing pressure; total depth 4095 ft; producing horizon 4087-95 ft; elev 334 ft derrick floor. Dirks Brothers' Fee 1, completed Nov. 23, 1932; flowing 378 bbls 44 gravity oil; 5/16-in choke; 500 lbs tubing, 600 lbs casing pressure; total depth 4298 ft; producing horizon 4276-98 ft; elev 361 ft derrick floor; (salt water increased from 5 percent of fluid and well plugged back to cut off water, but without success). V. I. Grisham's J. M. Rapp 1-B, completed July 29, 1933; flowing 187 bbls 43.9 gravity oil; 3/8-in choke; 500 lbs tubing, 600 lbs casing pressure; total depth 4393 ft; producing horizon 4377-93 ft; (plugged back to 4388 ft; production from near top of Yegua; 7-in casing set 4377 ft). **Geological Data:** Small sand lensing proposition with the dip to the east. **Producing Horizon:** Cockfield (Pettus sand) first oil producing horizon, Yegua second and third oil sand. **Producing Area:** 160 acres; 90 acres in oil. **Extent of Development:** (to Jan. 1, 1936) 21 wells, 10 oil, 3 gas, 8 failures. (During 6 months 1936) none. **Deepest Hole:** Clymore & Grisham's Rapp & Hatch 1, abd 4418 ft in Yegua. **Daily Production Aug. 1, 1936:** 5 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Pettus Refining Co. **Reserve Data:** 145,000 bbls ultimate from proven area; 132,482 bbls recovered to Jan. 1, 1936; 892 bbls recovered first 6 months 1936. **Principal Leaseholders:** C. F. Nichols, V. I. Grisham, Dirks Brothers, Trio Oil Co., Conservative Oil Co.

VOSS

Samuel May Survey, 3 mi e Mineral. **Means of Discovery:** Trend play along fault. **Discovery Data:** Howeth & Swiger (later De-

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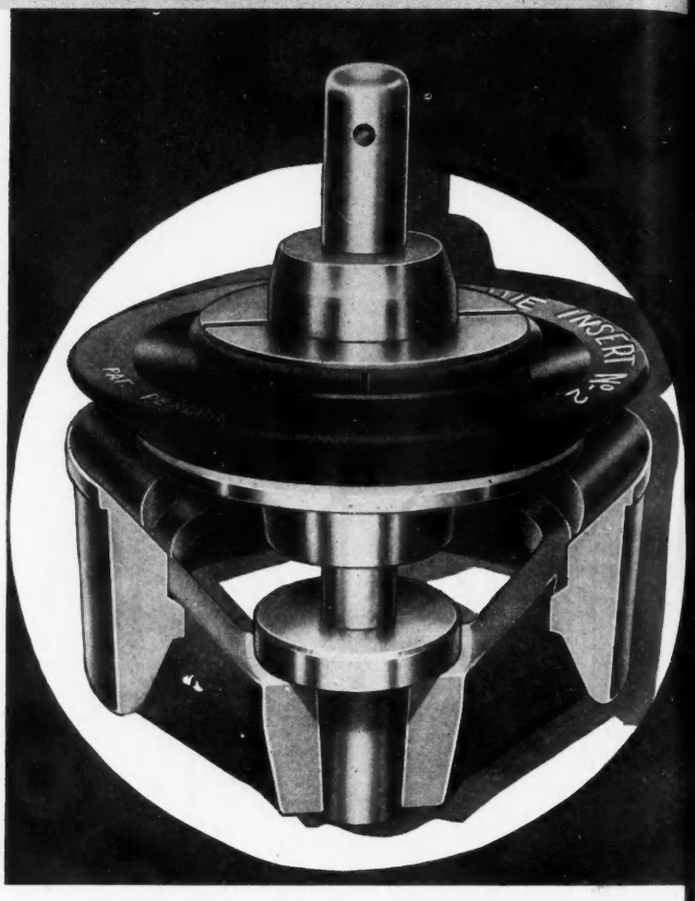

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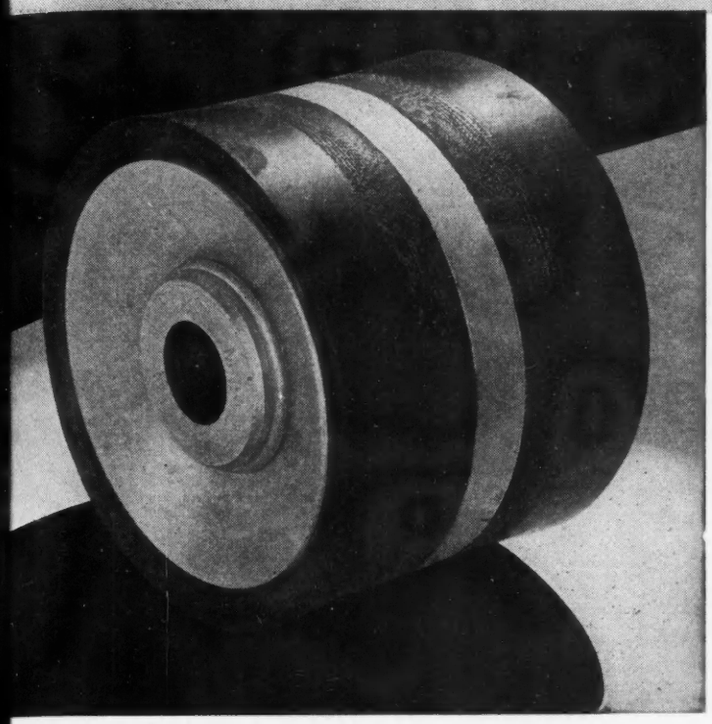

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vonian Oil Co.), C. A. Voss 1, completed June 21, 1936, flowing 98 bbls 47 gravity oil; 1/8-in choke; total depth 4019 ft; producing horizon 4015-19 ft; 7-in casing set 4015 ft. **Geological Data:** Sand closure against ne-sw fault. **Producing Horizon:** Cockfield (Pettus sand). **Producing Area:** 10 acres. **Extent of Development:** (During 6 months, 1936) 1 oil well. **Deepest Hole:** Dirks Brothers' M. M. Bergel 1, abd 4306 ft in Yegua, July 7, 1936. **Daily Production Sept. 1, 1936:** 125 bbls. **Rigs Running Sept. 1, 1936:** 1. **Market Outlet:** Pettus Refining Co. **Reserve Data:** 80,000 bbls ultimate from proven area; 1135 bbls recovered first 6 months 1936. **Principal Leaseholders:** R. B. Swiger, Humble Oil & Refining Co., The California Co., Dirks Bros., Tide Water Oil Co., Devonian Oil Co.

WEISS‡

B & B Survey, abstract 130. 4 mi sw Pettus. **Means of Discovery:** Geological data. **Discovery Data:** E. S. Price et al's Weiss 1, completed 1930; initial production 31,000,000 cu ft gas per day, spraying gasoline, total depth 4415 ft; elev 319 ft; sand 4411-15 ft. **Geological Data:** Sand lensing against fault. **Producing Horizon:** Upper Yegua. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 2 gas, 3 failures. (During 6 months 1936) none. **Deepest Hole:** E. S. Price et al's Weiss 2, abd 4553 ft, 1931. **Daily Production Aug. 1, 1936:** Wet gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Small amount of gasoline, delivered to local refinery. **Reserve Data:** Gas field. **Principal Leaseholder:** Weekly Oil Corp.

WEST TULETA

Sections 5, 6, 10, 9, 8, 20 and 21 of the J. M. Uranga grant, 1 mi w Tuleta. **Means of Discovery:** Geological information subsurface correlations on failures drilled on east flank of structure. **Discovery Data:** Dirks Bros.' Skinner-Harris 1, completed June 12, 1934, flowing 75 bbls 47.12 gravity oil and 20,000,000 cu ft gas; 1240 lbs casing pressure; total depth 3973 ft; producing horizon 3950-62 ft; 7-in casing 3950 ft. Wisenant & Trenchard et al's Rapp 2-B, completed Jan. 8, 1935; jetting 50 bbls oil per day; total depth 3910 ft; plugged back and perforated 3075-90 ft. **Geological Data:** Sand lensing and folding trending ne-sw. **Producing Horizon:** 3900-ft sand is Pettus in upper portion of Cockfield; 3000-ft sand Fayette or Whitsett, both of Jackson age. **Producing Area:** 1050 acres; 920 acres oil. **Extent of Development:** (to Jan. 1, 1936) 110 wells, 89 oil, 2 gas, 9 failures. (During 6 months 1936) none. **Deepest Hole:** E. M. Jones' Rapp 1, abd 6062 ft, July 31, 1930. **Daily Production Aug. 1, 1936:** 880. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Atlantic Pipe Line Co., Pettus Refining Co. **Reserve Data:** 6,200,000 bbls ultimate from proven area; 852,637 bbls recovered to Jan. 1, 1936; 198,020 bbls recovered first 6 months 1936. **Principal Leaseholders:** Blanco-Buchanan Oil Co., Circle "W" Oil Co., Heyser-Heard Walton, Houston Oil Co., Inter Allied Petroleum Co., E. M. Jones, Leslie McKay, Mills-Bennett, Tuleta Oil Corp., Wisenant & Trenchard, Dirks Bros., United Prod. Corp., Wrightsman Oil Co., Rodney De Lange, Bob Walton, Jake Hamon.

YOUGEEN*

Bee County School Land, M. R. H. Love, J. B. Madray and S. Allen Surveys, 2 mi w Yougeen. **Means of Discovery:** Geophysical work. **Extent of Development:** Felmont Oil Corp. abd J. T. Earnest 1 at 6340 ft, June 1, 1935; topped Hockleyensis 4625 ft, Cockfield 5546 ft, Yegua 5706 ft, elev 175 ft, derrick floor. Oil shows 4729½-39½ ft and 5715-82 ft. Another test is planned. **Principal Leaseholders:** Felmont Oil Corp., Magnolia Petroleum Co., Amerada Petroleum Corp.

BEXAR COUNTY

ADKINS*

Centering around J. Pena Survey, 1½ mi se Adkins. **Means of Discovery:** Surface indications. **Extent of Development:** 17 wells, 6 made very small producers in the Navarro sands around 600 ft. McClanahan et al's E. Shadrock 1, drilled to Edwards lime, at 2008 ft showing sulphur water. Only a limited amount of oil has been produced and marketed. State Oil & Gas Co. now drilling.

COFFEY

F. Rodriguez sur, 10 mi s San Antonio. **Means of Discovery:** Trend drilling on known fault. **Discovery Data:** I. L. Dingman & Russell Leasing Co.'s R. J. Coffey 1, Mar. 7, 1934, 1,500,000 cu ft gas 1034 feet; producing horizon 1017-34 ft, elev 591 ft, deepened to 1325 ft, pb, abd. **Geological Data:** Faulted structure, production on upthrow side. **Producing Horizon:** Gas and oil in Taylor at or near top of Austin chalk. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 7 wells; 1 gas, 6 failures; (During 6 months 1936) 3 wells; 1 oil, 2 failures. **Deepest Hole:** Joe Dupree's S. G. Winter 1, abd 1853 feet, June 18, 1936, after testing sulphur water in Edwards lime topped at 1700 ft; elev 581 ft. **Daily Production Aug. 1, 1936:** 18 bbls. **Rigs Running Aug. 1, 1936:** One. **Market Outlets:** Trucks. **Reserve Data:** 10,000 bbls ultimate from proven area; 1600 bbls recovered first 6 months 1936. **Principal Leaseholder:** Joe Dupree et al. **Remarks:** One well later developed 12.9 gravity oil in the same horizon; this field is between Alta Vista and Mission and likely connects them.

COOKSEY

J. W. Rialls Survey, 15 mi e San Antonio. **Means of Discovery:** Geological information. **Discovery Data:** Penn Oil Company's

*Prospect. †Salt dome, no production. ‡Gas field.

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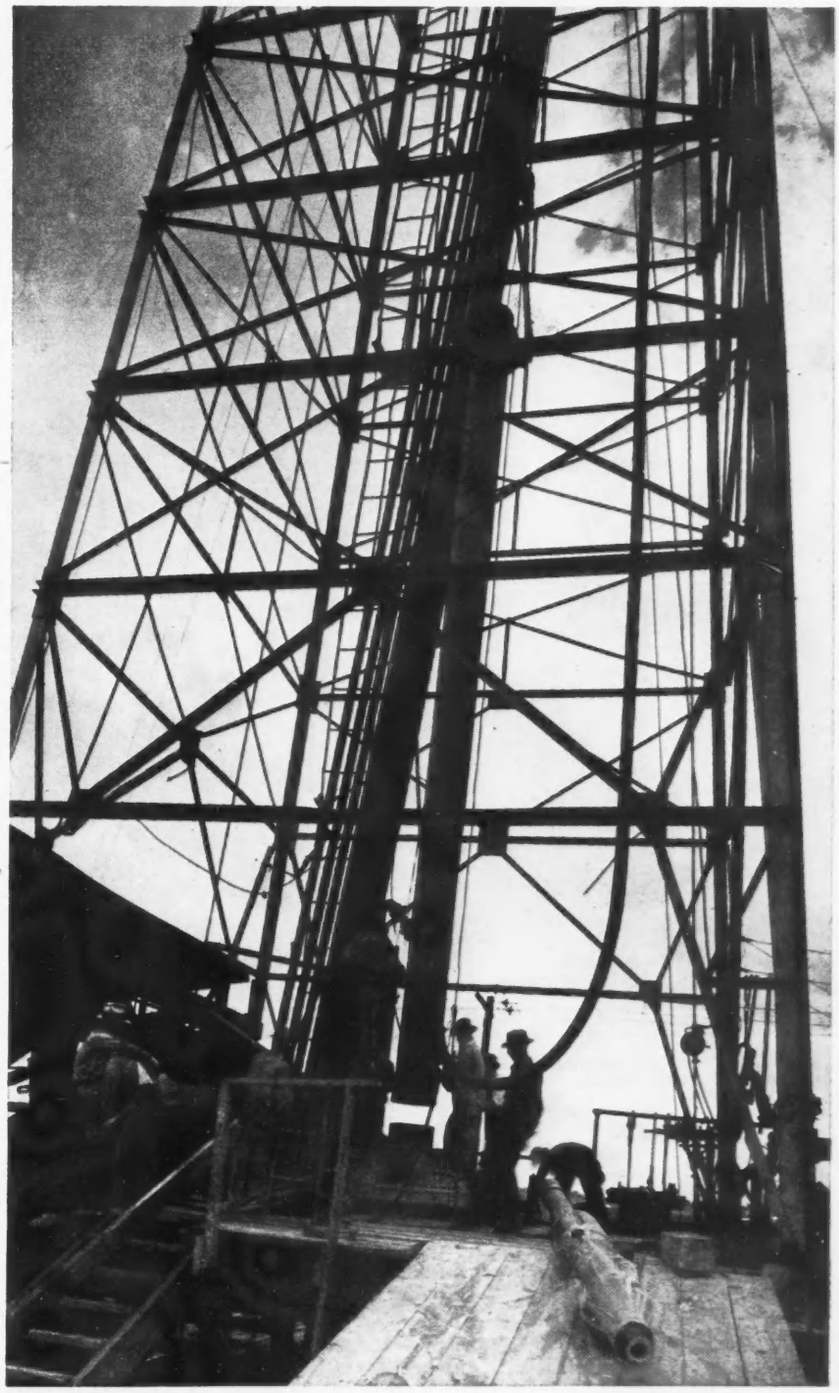

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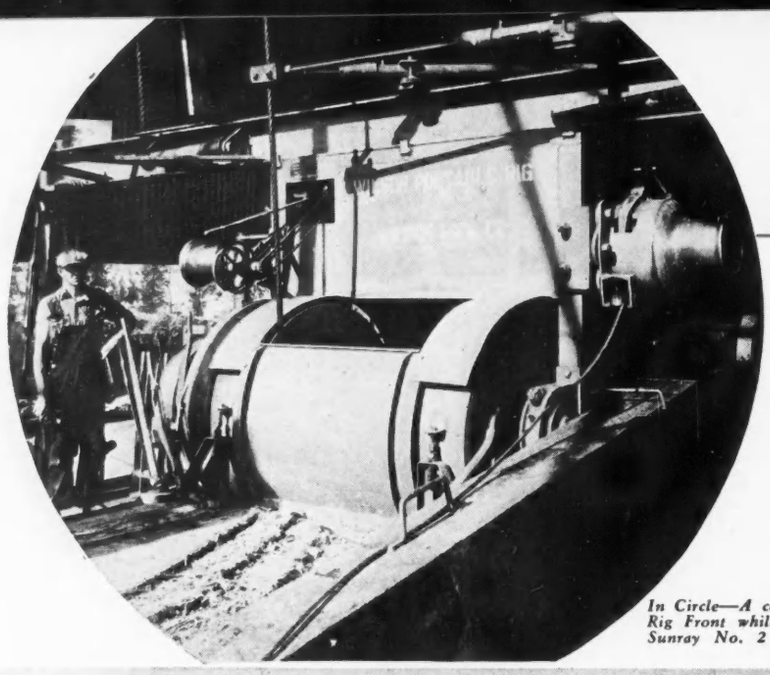

POWER?

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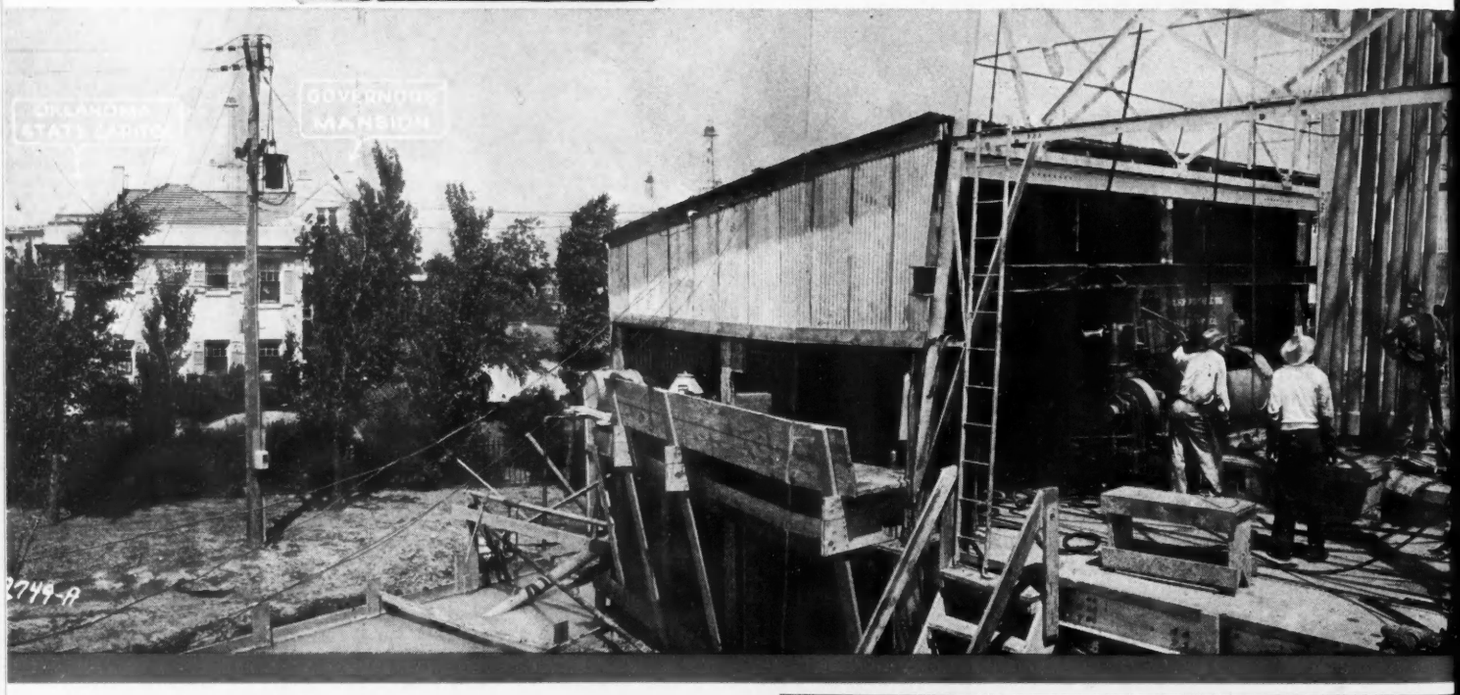
In Circle—A camera close-up of Wilson Rig Front while in actual operation on Sunray No. 2 well in Mansion Area.



Sunray No. 2 well with Governor's Mansion and Oklahoma State Capitol at left in background. 6358 feet of 11″ hole was drilled. 8⅝″ (38 lb.) pipe was set and cemented at this depth without difficulty. The well was completed at 6518 feet.

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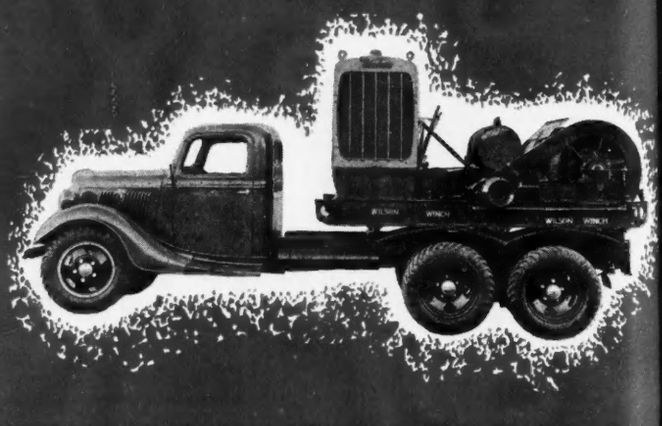

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Cooksey 1, completed Oct. 18, 1930; pumping 100 bbls 35.8 gravity oil per day; total depth 1461 ft; producing horizon 1410-61 ft; elev 600 ft. **Geological Data:** Sand and shale producing formation, back up against ne-se faulting. **Producing Horizon:** Taylor marl series. **Producing Area:** 65 acres. **Extent of Development:** (to Jan. 1, 1936) 21 wells, 14 oil, 7 failures. (During 6 months, 1936) none. **Deepest Hole:** Penn Oil Co.'s Don Kosub 1, abd 2259 ft, Dec. 19, 1930. **Daily Production Aug. 1, 1936:** 10 barrels. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Trucked to Eckert field and run to Somerset through Pioneer Oil & Refining Co. line. **Reserve Data:** 104,500 bbls ultimate from proven area; 67,101 bbls recovered to Jan. 1, 1936; 1741 bbls recovered first 6 months 1936. **Principal Leaseholders:** This is unitized block and title to all property in Chiquita Oil Co.

ECKERT

Includes P. L. Buquor, Gotari No. 5, No. 4, Juan Montez No. 52, and No. 4 surveys, 6 mi se San Antonio. **Means of Discovery:** Showings of oil in water wells. **Discovery Data:** F. H. Eckert & Son's Paul Dobrowolski 1, completed Sept. 11, 1928, 6 bbls 35.4 gravity oil, 702 ft, elev 575 ft, sand 687-700 ft. Alamo Natural Gas Co.'s Coreth 1, completed Aug. 8, 1932, 1,000,000 cu ft gas, 1059-1061 ft; elev 540 ft. **Geological Data:** Sand lensing against several ne-sw faults, with minor cross faulting. **Producing Horizon:** Navarro sands producing upper gas and oil; lower Taylor, near top of Austin chalk producing deeper gas. **Producing Area:** 950 acres; 860 acres oil. **Extent of Development:** (to Jan. 1, 1936) 166 wells, 133 oil, 7 gas, 26 failures. (During 6 months, 1936) 2 oil wells. **Deepest Hole:** F. H. Eckert & Sons' Braym 4, drilled to 1580 ft in Edwards lime, plugged back and completed in 700-ft sand. **Daily Production Aug. 1, 1936:** 245 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlet:** Pioneer Oil & Refining Co. has line to Somerset. **Reserve Data:** 1,462,000 bbls ultimate from proven area; 609,991 bbls recovered to Jan. 1, 1936; 47,248 bbls recovered first 6 months 1936. **Principal Leaseholders:** Gatlin Oil Co., B. Miller, Rosate & Co., Alamo Natural Gas Co., Swearingen & White, Bowman & Richards, Eckert & Son, S. R. & C. Oil Corp. **Remarks:** Production developed just southwest of this field on Dullnig property shortly after 1900 at about 240 ft. Only a limited amount of oil was recovered from 4 wells, and other tests drilled failed to produce in lower levels, such as regular sands of this field.

GAS RIDGE

M. F. Rodriguez, Francisco Rivas, F. F. Morales and Munos Surveys, 3 mi sw San Antonio. **Means of Discovery:** Geological information. **Discovery Data:** Meecham et al's Oliver 1, completed 1912, 850 ft, 12,000,000 cu ft gas. Shallow oil production developed in a few wells in a sand ranging from 300 to 500 ft. **Geological Data:** Domal type structure, some faulting, sand lensing. **Producing Horizon:** Midway, Navarro, Taylor, Austin chalk. **Producing Area:** 360 acres; 80 acres oil. **Extent of Development:** (to Jan. 1, 1936) 114 wells, 18 oil, 82 gas, 14 failures. (During 6 months 1936 none. **Deepest Hole:** American Gas Co.'s Oliver 5, 3161 ft; casing stuck near bottom, shut down Aug. 1, 1936. **Daily Production Aug. 1, 1936:** 6 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlet:** Trucks. United Gas System taking gas. **Reserve Data:** 74,400 bbls ultimate from proven area; 56,761 bbls recovered to Jan. 1, 1936; 1140 bbls recovered first 6 months 1936. **Principal Leaseholders:** United Gas System controls field and operating it, although leases held by others; A. W. Pauskey, American Gas Co.

LONE OAK

J. M. Arocha grant, 16 mi e San Antonio. **Means of Discovery:** Geological information and trend drilling on known fault. **Discovery Data:** Paul L. Meaders et al's W. Cantu 1, completed Oct. 1, 1934, pumping 25 bbls 33.4 gravity oil, total depth 2255 ft; elev 576 ft derrick floor; plugged back 1750 ft; 6⅝-in set 1435 ft; sands 1480-90 ft and 1612-20 ft. **Geological Data:** Sand lens against faulting. **Producing Horizon:** Navarro-Taylor series—top Austin chalk 2058 ft, top Edwards lime 2230 ft. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 2 oil wells. (During 6 months 1936) none. **Daily Production Aug. 1, 1936:** Well shut in. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** 15,000 bbls ultimate from proven area; 2086 bbls recovered to Jan. 1, 1936; none recovered first 6 months 1936. **Principal Leaseholders:** J. D. Collett, Humble Oil & Refining Co., Meaders, L. B. Snider and Sid Roberts, Circle W Oil Co., Abercrombie & Harrison, Talbot Drilling Co., Landon & Straus, Mid-Continent Petroleum Co., C. L. Smith.

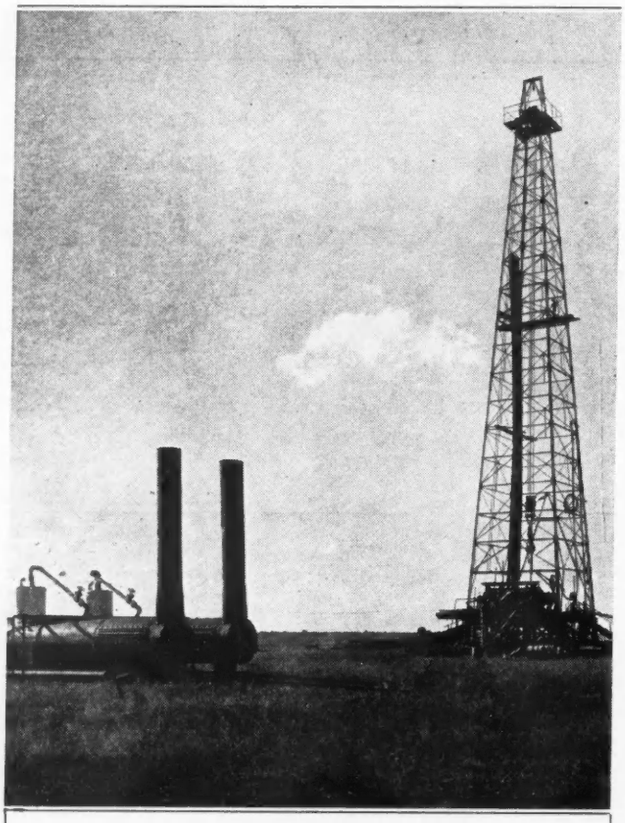
MACDONNA

Jose M. Barriera Survey No. 58, 2 mi e Macdonna. **Means of Discovery:** Trend play. **Discovery Data:** F. M. Shaver's A. W. Bitter 2, completed Aug. 2, 1936, pumping 5 bbls 39 gravity oil, total depth 1324 ft, producing horizon 476-521 ft, plugged back 521 ft, 8-in 476 ft. **Geological Data:** Sand lensing. **Producing Horizon:** Navarro. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) no wells completed. (During 6 months 1936) 2 failures. **Deepest Hole:** Discovery well. **Daily Production Aug. 1, 1936:** 5 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlet:** Trucks. **Reserve Data:** New field, no data. **Principal Leaseholder:** Fred Shaver.

MISSION

On Leon Creek in F. Rodriguez, A. Navarro and I. Perez surveys, 12 mi s San Antonio. **Means of Discovery:** Shallow well drilled for water encountered oil. Deeper drilling developed other producing level. **Discovery Data:** Frank Lynn's Fee 1, 1904; drilling for water encountered oil about 110 feet, later drilling de-

*Prospect. †Salt dome, no production. ‡Gas field.



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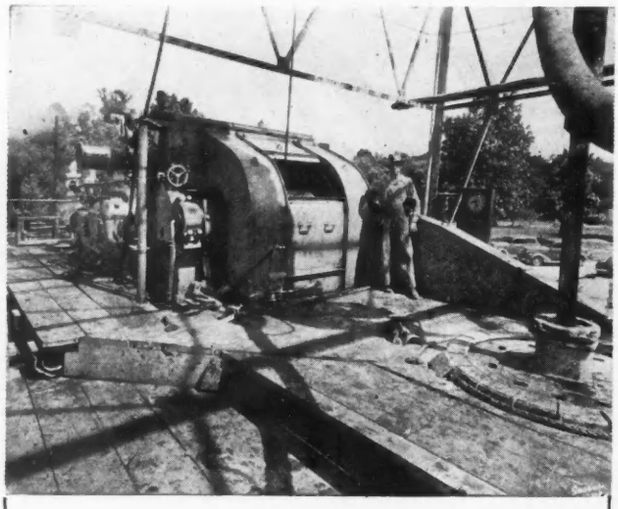

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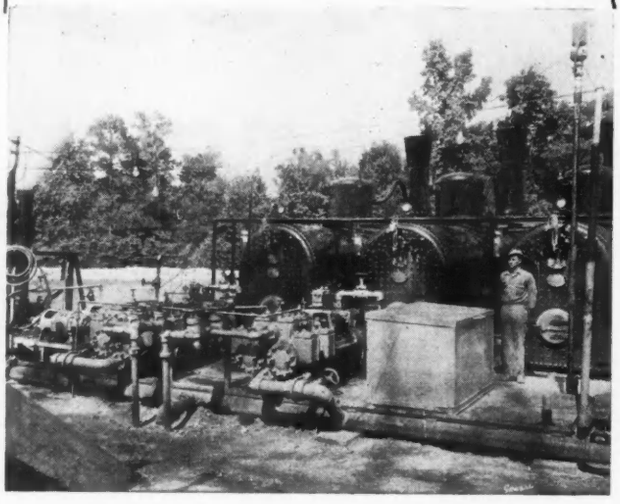

veloped production around 1000-1100 ft. **Producing Horizon:** Upper production above contract of Midway and Navarro, lower production in Taylor, about 75 ft above top of Austin chalk. **Producing Area:** 275 acres, 200 acres oil. **Extent of Development:** (to Jan. 1, 1936) 56 wells; 32 oil, 2 gas, 12 failures; (During 6 months 1936) None. **Daily Production Aug. 1, 1936:** None. **Rigs Running Aug. 1, 1936;** None. **Market Outlets:** Trucks. **Reserve Data:** 65,875 bbls ultimate from proven area; 68,875 bbls recovered to Jan. 1, 1936. **Principal Leaseholders:** Joe Dupree, I. L. Dingman, Russell Leasing Company, Van Petty, The Texas Company. **Remarks:** This field was abd in 1928 except for several very shallow wells which were pumped about once each week. Joe Dupre completed an oil producer early in 1936 to the northeast of these old wells, which may lead to revival of the area.

SOUTH VON ORMY*

Centering around Francisco Rolen League and Labor Survey No. 48, 1 mi s Von Ormy. **Means of Discovery:** Geological information and surface indications of faulting. **Extent of Development:** 26 wells have been drilled, several showing for small producers. Von Ormy Oil Co.'s E. B. Carruth 1, completed Nov. 11, 1933, pumping 10 bbls 34 gravity oil, 784 ft, 10-in casing 560 ft, sand logged 770-80 ft. Texas Petroleum Co.'s E. B. Carruth 1, completed Aug. 16, 1934, 250,000 cu ft gas spraying some oil with 425 lbs pressure, 1183 ft, 6⅝-in casing 530 ft, 4½-in liner 840 ft. Oil and gas was found in the Navarro-Taylor series. Several wells were drilled into the Edwards between 1650-1800 ft. **Principal Leaseholders:** E. R. Cosby, Texas Petroleum Co., C. A. Ingersoll.

THELMA*

Martinez Survey, 1 mi w Thelma. **Means of Discovery:** Trend drilling on known fault. several shows encountered in previously drilled wells. **Extent of Development:** Noble & Aiken's R. W. Devilbiss 1 abd March 25, 1935, after showing considerable oil in base of Taylor marl and upper portion of Austin chalk. Sandy lime was encountered at 2214-58 ft, showing gas and sandy lime with oil and gas from 2058-75 ft. Shale and lime with slight oil show at 2075-2222 ft and top of Austin chalk 2022-32 ft. It bailed considerable oil, but was abandoned as a junked hole. Woodward & Hardie are drilling a well close to this location.

VON ORMY

F. Rolen League and Labor, S. McCullough, Stephen Jett, James Simpson, J. M. Barrera Surveys, centering around Von Ormy. **Means of Discovery:** Geological information and surface indications; faulting evidenced. **Discovery Data:** Wm. A. Biel's Fee 1, completed June 24, 1931, pumping 3 bbls 36 gravity oil; total depth 714 ft, producing horizon 709-14 ft, 6⅝-in casing 461 ft. **Subsequent Discoveries:** C. F. Albertson's Hoch 1, completed March 9, 1933, initial production 50,000 cu ft gas 160 lbs rock pressure, total depth 505 ft, producing horizon 230-400 ft. **Geological Data:** Series of sand and sandy shale strikes backed up against small ne-sw fault. **Producing Horizon:** Navarro sand and shale. **Producing Area:** 825 acres. **Extent of Development:** (to Jan. 1, 1936) 53 wells, 36 oil, 5 gas, 12 failures. (During 6 months 1936) 25 wells, 20 oil, 5 failures. **Deepest Hole:** A. J. Trawalter et al's Trawalter 2, completed as fresh water well in Edwards lime, 1615 ft, May 1, 1934. **Daily Production Aug. 1, 1936:** 143 bbls. **Rigs Running Aug. 1, 1936:** 6. **Market Outlet:** Trucks. **Reserve Data:** 371,250 bbls ultimate from proven area; 18,640 bbls recovered to Jan. 1, 1936; 16,657 bbls recovered first 6 months 1936. **Principal Leaseholders:** Nuswald Oil Co., Armoil Oil Co., Shadrock Oil Co., Wm. Stewart, Nick Marosis, Richcul Oil Co., Jacob Wolff.

YTURRI—SOUTHTON

J. de la Garza, J. Sandoval, Juan Montes Surveys, 1 mi sw Southton. **Means of Discovery:** Geological information, trend play along series of surface fault. **Discovery Data:** First production developed May 11, 1922, at about 900 ft with 15-bbl well, producing 34 gravity oil, elev 545 ft. **Geological Data:** Faulting and sand lensing, sand approximately 10 feet thick. **Producing Horizon: Navarro** sand. **Producing Area:** 850 acres. **Extent of Development:** (to Jan. 1, 1936) 140 wells, 118 oil, 22 failures. (During 6 months 1936) 2 oil wells. **Deepest Hole:** Wm. H. Reynolds' Yturri 1, abd 3852 ft. **Daily Production Aug. 1, 1936:** 65 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlet:** Pioneer Oil & Refining Co. line to Somerset. **Reserve Data:** 680,000 bbls ultimate from proven area; 539,515 bbls recovered to Jan. 1, 1936; 10,032 bbls recovered first 6 months 1936. **Principal Leaseholders:** J. B. Cicero, Ginter Lange Oil Co., Rentex Oil Co., Salado Oil Co.

BROOKS COUNTY

ALTA MESA†

Las Mestenas grant, 25 miles sw Falfurrias. **Means of Discovery:** Drilling fresh water wells, encountered gas showings and completed as a producer. **Discovery Data:** W. W. Jones' Fee 1; completed June 2, 1926, 2,000,000 cu ft gas; total depth 1220 ft; sand 1200-20 ft; elev 480 ft. **Geological Data:** Likely domal type structure, little information, indication of being a salt dome. **Producing Horizon:** Gas from Oakville. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 12 wells, 2 gas, 10 failures. (During 6 months, 1936) none. **Deepest Hole:** The California Co.'s Mrs. B. Garcia; total depth 8022 ft; lost drill stem in hole, plug back and tested upper sands. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** One. **Reserve Data:** Gas only. **Principal Lease Holders:** Otto Woods, Amos Dinn Trustee, M. P. Evans and The California Company.

ALTA VERDE†

G. C. & S. F. Survey, 309, 312, 313, 436, 5 mi sw Falfurrias. **Means of Discovery:** Surface geology; Humble Oil & Refining Co. and Shell Petroleum Corp. worked area with geophysical

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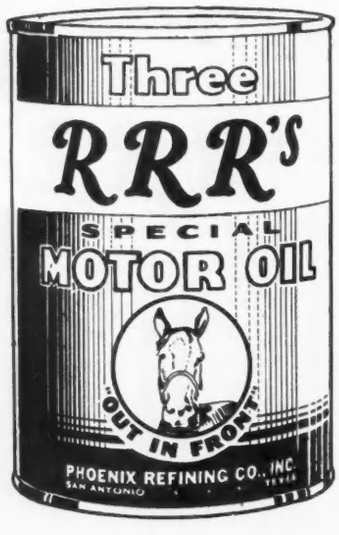

equipment, 1928-1929. **Discovery Data:** Dick Young et al's Wm. Singer 1; completed March 18, 1936; pumping 80 bbls 21.5 gravity oil; total depth 926 ft; producing horizon 916½-26 ft; 6⅝-inch 915 ft. **Geological Data:** Salt dome, structure cut by some fault. **Producing Horizon:** Caprock (Miocene). **Producing Area:** 120 acres. **Extent of Development:** (to Jan 1., 1936) 7 wells, 7 failures. (During 6 months 1936) 4 wells, 2 oil, 1 gas, 1 failure. **Deepest Hole:** Southern Crude Oil Purchasing Co.'s Holbien Wormser 1, 5105 ft; elev 370 ft. **Daily Production Aug. 1, 1936:** 110 bbls. **Rigs Running Aug. 1, 1936:** Two. **Market Outlet:** Trucks. **Reserve Data:** 210,000 bbls ultimate from proven area; no oil recovered to Jan. 1, 1936; 6850 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Dick Young, Ike Howeth, Fairway Production Co., Starr Development Co., Nordan & Morris, J. M. Nash.

GYP HILL*†

Centering around Section 331, se of Falfurrias. **Means of Discovery:** Conceded as salt dome with gypsum, typical of salt dome caprock, at surface. Dome is immediately south of a salt lake and is marked by surface high just south of this lake. **Extent of Development:** Only small amount of shallow drilling by Sun Oil Company, Producers Oil Company, The Texas Co., Ballard & Underwood, Pittsburg Oil Development Co. Ten wells drilled, one showing some oil. Texas Co.'s Lasater 3, deepest hole. Abandoned Dec. 6, 1927 at 4878 ft, probably in Cockfield. **Principal Leaseholders:** Shell Petroleum Corp., The Texas Co., Sun Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Tandy C. Young.

PALO BLANCO†

Palo Blanco de Maguellos Grant, Y. Pena Survey. **Means of Discovery:** Geological and geophysical information. **Discovery Data:** Houston Oil and Shell Petroleum Corp.'s E. C. Lassiter 1; completed Sept. 22, 1929; initial production 25,000,000 cu ft gas; spraying small quantity of 45 gravity oil; total depth 4120 ft; producing horizon 4117-20 ft; elev 341 ft. Allen & Morris' Holbein Wormser 2; completed June 13, 1932, 40,000,000 cu ft gas; total depth 1190 ft; sand 1176-90 ft. **Geological Data:** Domal type structure, likely salt dome. **Producing Horizon:** Shallow gas from Oakville, lower oil and gas sand likely from Jackson series. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 1 oil, 3 gas, 5 failures. (During 6 months 1936) none. **Deepest Hole:** Houston Oil Co.'s Holbein-Wormser 1, abd 6603 ft, was completed January, 1930, at 4138-50 ft, flowing 300 bbls 45.5 gravity oil with 10,000,000 cu ft gas, ⅞-inch choke, but was drilled deeper. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936;** None. **Principal Leaseholders:** Houston Oil Co., Shell Petroleum Corp., Allen & Morris, Pittsburg Petroleum Corp., Stanolind Oil & Gas Co., United Producing Co.

BURLESON COUNTY

CHREISMAN*

Centering around Sante, I & GN Railroad, Shaw, Kopp, W. C. Pierce and adjoining surveys and on Milam-Burleson County line. **Means of Discovery:** Geological work indicated faulting of considerable proportions. **Extent of Development:** Red Bank Oil Co. (Walter Blumenthal) drilled Q. V. Crain 1 in the Pierce Survey, finding showings of live oil, gas and water in the Edwards lime, but abandoned April 17, 1936. Elev 547 ft, topped lime 6294 ft and went to 6340 ft. A second well is being drilled by this company ½-mile nw of the first test. **Principal Leaseholders:** Red Bank Oil Company, Gulf Oil Corp., Superior Oil Co., Humble Oil & Refining Co., Sun Oil Co., Magnolia Petroleum Co., H. H. Coffield, The Texas Co., Tide Water Oil Co.

CALDWELL COUNTY

BRANYON

John Neill, D. Cooper, R. B. Jamison, J. R. Muller Surveys, 6 mi se Lockhart. **Means of Discovery:** Geological information, trend drilling on known fault. **Discovery Data:** The Texas Co.'s (J. H. Butte), F. M. Branyon 1; completed April 29, 1931; flowing 300 bbls oil; total depth 2244 ft; producing horizon 2241-44 ft. **Geological Data:** Crevices and broken chalk against fault. **Producing Horizon:** Austin chalk. **Producing Area:** 120 acres. **Extent of Development:** (to Jan. 1, 1935) 31 wells, 7 oil, 24 failures. (During 6 months 1936) 3 wells, 2 oil, 1 gas. **Deepest Hole:** Adams & Lyles' Kelly 1; abd 2680 ft. **Daily Production Aug. 1, 1936;** Included in Luling runs. **Rigs Running Aug. 1, 1936:** Four. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 216,000 bbls ultimate from proven area; 78,997 bbls recovered to Jan. 1, 1936; 9145 bbls recovered first 6 months 1936. **Principal Leaseholders:** The Texas Co., L. M. Kniffin, Webster Oil & Gas Co., L. W. Stieren; Lincoln Petroleum Co., Wheelock & Collins.

BUCHANAN

C. W. Cannon, W. Spillers, J. Pinchback Surveys, 5 mi e Lockhart. **Means of Discovery:** Geological information, trend play. Indications of faulting at surface. **Discovery Data:** Al Buchanan et al's L. K. Brown 1; completed July 10, 1929; total depth 2053 feet; top serpentine 1740 ft; elev 469 ft; 6⅝-inch 1730 ft; 4¾-inch liner 340 ft to total depth. Al Buchanan et al's W. T. Cude 2-A; completed June 9, 1930; initial production 70 barrels oil; total depth 2442 ft; top Edwards lime 2424 ft. J. E. Mills et al's McMahon 1; completed Feb. 21, 1931; initial production 7 bbls 39.5 gravity oil; total depth 2185 ft; top Austin chalk

*Prospect. †Salt dome, no production. ‡Gas field.

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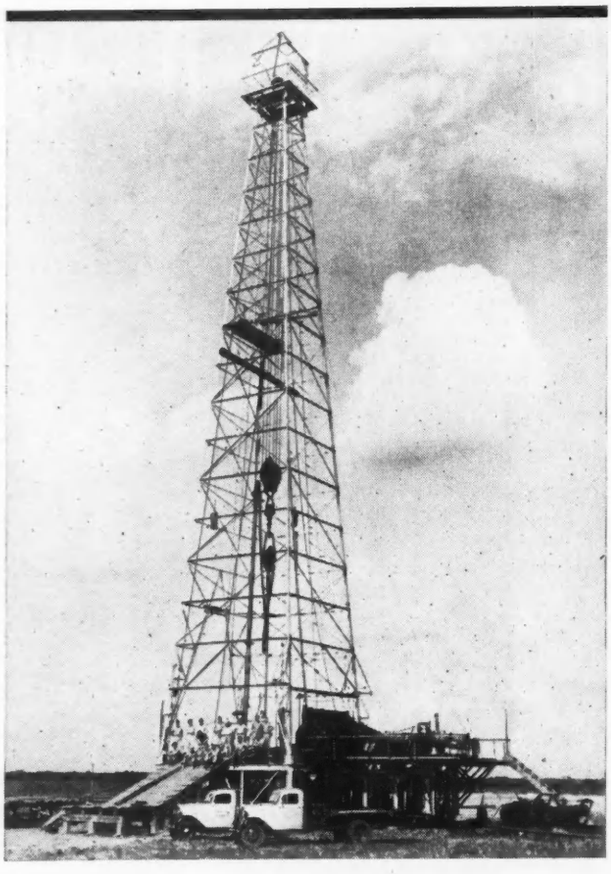

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2115 ft; elev 448 ft; later drilled to 2595 ft, abd April 14, 1931. J. E. Mills et al's S. F. McMahon 2; completed April 9, 1931; initial production 8,000,000 cu ft sweet gas; total depth 976 ft; sand 954-63 ft; 8¼-inch 930 ft. **Geological Data:** Production mainly on upthrow side of ne-sw fault. Several wells on other side in serpentine. **Producing Horizon:** Shallow gas from Midway-Navarro series. First oil production from serpentine, second from broken chalk, third from Edwards lime. **Producing Area:** 150 acres. **Extent of Development:** (to Jan. 1, 1936) 23 wells, 8 oil, 1 gas, 14 failures. (During 6 months 1936) none. **Deepest Hole:** Gulf Production Co.'s W. E. Witter 1; abd 2762 ft. **Daily Production Aug. 1, 1936:** 40 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 262,500 bbls ultimate from proven area; 164,876 bbls recovered to Jan. 1, 1936; 5818 bbls recovered first 6 months 1936. **Principal Leaseholders:** Al Buchanan, Sun Oil Co., The Texas Co., Humble Oil & Refining Co.

DALE

Nick Kelly, Squire Damon, W. C. Swearingen, J. Gilbert, George James Surveys. Se Dale. **Means of Discovery:** Geological information. **Discovery Data:** The Texas Co.'s Beatty 1; completed Aug. 29, 1927; pumping 50 bbls 37.5 gravity oil; total depth 2324 ft. **Geological Data:** Some faulting with production backed up against upthrow side. **Producing Horizon:** Locally known as Dale lime, conglomerate of Taylor chalk and serpentine. **Producing Area:** 230 acres. **Extent of Development:** (to Jan. 1, 1936) 60 wells, 42 oil, 18 failures. (During 6 months 1936) 11 wells, 6 oil, 5 failures. **Deepest Hole:** Magnolia Petroleum Co.'s Taylor 1; abd 2765 ft in Edwards lime, Oct. 10, 1927. **Daily Production Aug. 1, 1936:** 385 bbls. **Rigs Running Aug. 1, 1936:** One. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 1,715,000 bbls ultimate from proven area; 1,060,303 bbls recovered to Jan. 1, 1936; 50,069 bbls recovered first 6 months 1936. **Principal Leaseholders:** Adams & Lyles, W. B. Hinton, Noack & Lanning, Sun Oil Co., The Texas Co., Ogden & Reed, W. B. Moore, Marts & Beavans, Burwyn Oil Co. **Remarks:** New area just n of production recently discovered and being developed.

DUNLAP

Solomon Seal Survey, 3 mi w Luling. **Means of Discovery:** Geological information. **Discovery Data:** M. O. Rayor et al's Dunlap 1-A, completed July 15, 1931; pumping 30 barrels 38 gravity oil; total depth 2525 ft; producing horizon 2299-2304 ft; top Edwards lime 2511 ft; top chalk 2092 ft; 6⅝-in 2127 ft; plugged back and completed in chalk. **Geological Data:** Crevices and broken formation from basal Taylor to near top of Edwards lime. Mainly on upthrow side of fault. **Producing Horizon:** Taylor marl to near top of Edwards lime, intermediate formations. **Producing Area:** 60 acres. **Extent of Development:** (to Jan. 1, 1936) 20 wells, 7 oil, 13 failures. (During 6 months 1936) 4 wells; 1 oil, 3 failures. **Deepest Hole:** R. Y. Walker's (was Bob Rose) J. M. Pierce 1-B; total depth 2539 ft; top Edwards lime 2532 ft; plug back and completed as oil well May 10, 1935. **Daily Production Aug. 1, 1936:** 96 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Texas Pipe Line Co. **Reserve Data:** 360,000 bbls ultimate from proven area; 246,283 bbls recovered to Jan. 1, 1936; 8254 bbls recovered first 6 months 1936. **Principal Leaseholders:** Empire Gas & Fuel Co., R. Y. Walker, Pat Armstrong, Detroit-Texas Development Co. **Remarks:** Number of tests drilled along this fault; several striking crevices at different levels, hence all are considered as coming from same section rather than subsequent discoveries.

LARREMORE

C. Crenshaw, W. Farrin Surveys, 8 mi sw Lockhart. **Means of Discovery:** Geological information. **Discovery Data:** Roxana Petroleum Corp.'s A. W. Jolly 1; completed June 27, 1928; initial production 35 bbls 23.5 gravity oil and about 180 bbls sulphur water; total depth 1351 ft; producing horizon top Edwards lime 1309 ft; elev 570 ft. **Geological Data:** Producing from upthrow side of ne-sw fault with upthrow side to se. **Producing Horizon:** Edwards lime. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 18 wells, 13 oil, 5 failures. (During 6 months 1936) 1 oil well. **Deepest Hole:** Shell Petroleum Corp.'s B. O. Shafer 1; abd 1857 ft in Glenrose, May 13, 1929. **Daily Production Aug. 1, 1936:** 52 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Trucks. **Reserve Data:** 304,000 bbls ultimate from proven area; 214,109 bbls recovered to Jan. 1, 1936; 7429 bbls recovered first 6 months 1936. **Principal Leaseholders:** Louis Crouch, C. & C. Fuel Oil Co. **Remarks:** Shallowest Edwards lime field in Luling district.

LYTTON SPRINGS

Gideon Pace, Pable Martinez, F. Costello, Burleson Surveys, e Lytton Springs. **Means of Discovery:** Geological information. **Discovery Data:** Storey and Lefevre's Brewer 1; completed March 13, 1925, pumping 75 bbls 37.5 gravity oil; total depth 1252 ft; serpentine 1220-52 ft. **Geological Data:** Oval shaped plug dipping in all directions; igneous rock ranges to 600 ft in thickness. **Producing Horizon:** Serpentine. **Producing Area:** 1380 acres. **Extent of Development:** (to Jan. 1, 1936) 329 wells; 289 oil; 30 failures. (During 6 months 1936) 2 failures. **Deepest Hole:** Edwards lime test, abd 2292 ft. **Daily Production Sept. 1, 1936:** 356 bbls. **Rigs Running Sept. 1, 1936:** Two. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 8,280,000 bbls ultimate from proven area; 7,289,871 bbls recovered to Jan. 1, 1936; 70,928 bbls recovered first 6 months 1936. **Principal Leaseholders:** Witherspoon Oil Co., Magnolia Petroleum Co., Humble Oil & Refining Co., Gulf Oil Corp., The Texas Co., Sun Oil Co., Mid-Kansas Petroleum Corp., Johnson Brothers, Cosmo Oil Co.

SALT FLATS

A. Floyd, Gerren Hinds, James Hinds, John Rains Surveys, 1 mi n and ne Luling. **Means of Discovery:** Geological information. **Discovery Data:** Lutex Oil Co.'s (Sullivan-Bruner et al) Davis 1; completed May 28, 1928; flowing 268 bbls oil from Austin chalk

*Prospect. †Salt dome, no production. ‡Gas field.

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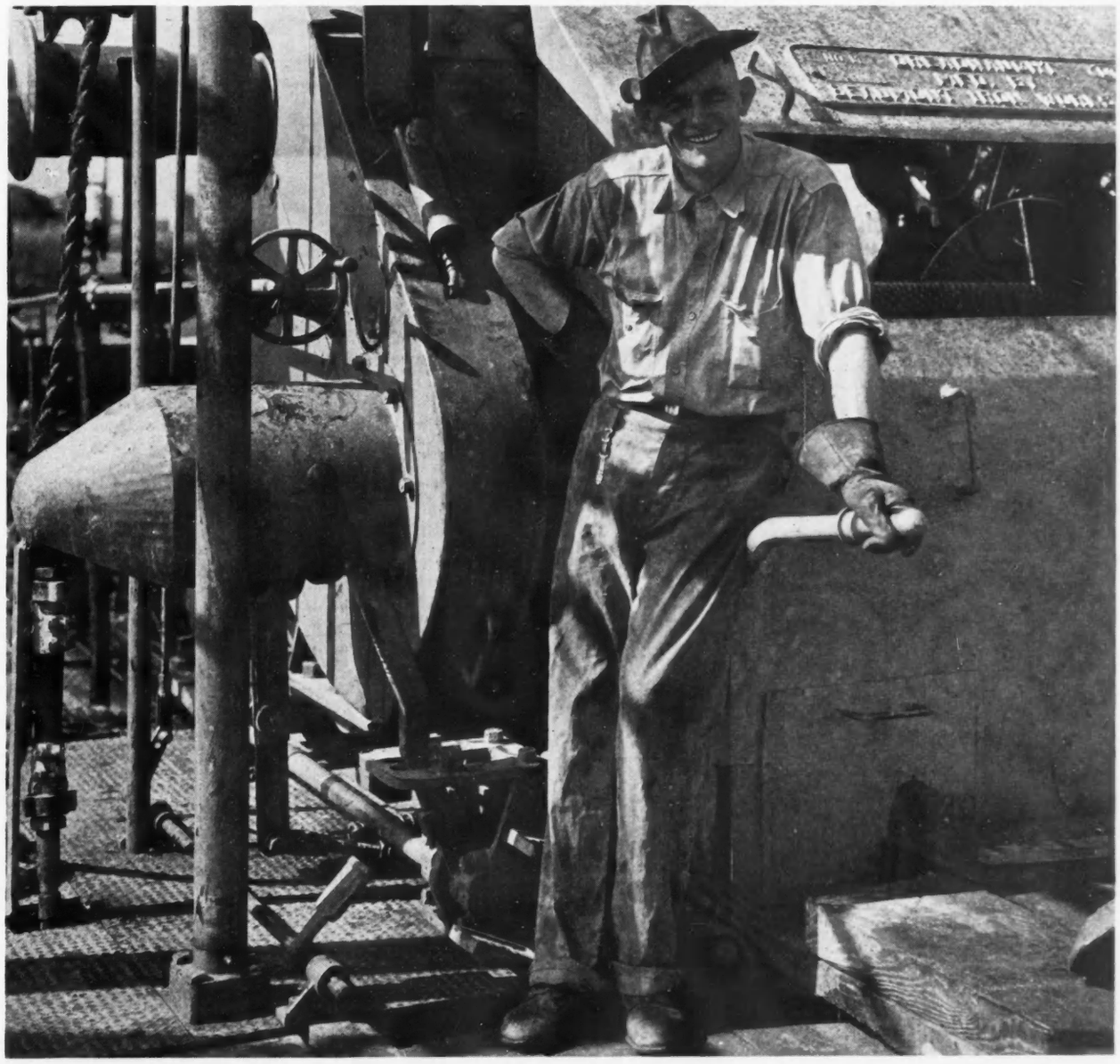

DREADNAUGHT

at 2684 ft, later deepened to Edwards lime. Sun Oil Co.'s Malone 1; completed Oct. 10, 1928; flowing 720 bbls 36.5 gravity oil; total depth 2743 ft; top Edwards lime 2712 ft; elev 406 ft. **Geological Data:** Long narrow producing area on upthrow side of fault; field 7 mi long and 2100 ft wide. **Producing Horizon:** Austin chalk, Duda lime, Del Rio clay and Edward lime, latter horizon being major producer. **Producing Area:** 1050 acres. **Extent of Development:** (to Jan. 1, 1936) 373 wells, 337 oil, 2 gas, 34 failures. (During 6 months 1936) 4 oil wells. **Deepest Hole:** No well drilled deeper than 100 feet into Edwards lime. **Reserve Data:** 39,375,000 bbls ultimate proven area; 33,780,650 bbls recovered to Jan. 1, 1936; 715,444 bbls recovered first 6 months 1936. **Daily Production Aug. 1, 1936;** 4068 bbls. **Rigs Running Aug. 1, 1936;** One. **Market Outlets:** Shell Pipe Line Co., Gulf Pipe Line Co., Humble Pipe Line Co., have truck line connections. **Principal Leaseholders:** Sun Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Texas Co., Shell Petroleum Corp.

LULING

In Caldwell and Guadalupe Counties; James Berry, Nancy Reavill, John Henry, Harriet Cottle Surveys, 5 mi w Luling. **Means of Discovery:** Geological information. **Discovery Data:** United North & South Oil Co.'s Rios 1; completed Aug. 8, 1922; flowing 150 bbls 28 gravity oil; total depth 2235 ft; producing horizon 2205-35 ft; also 1500 barrels sulphur water. **Geological Data:** Producing on the upthrow side of large fault; 8 mi long and ranges from 300 to 3400 ft wide. **Producing Horizon:** Edwards lime. **Producing Area:** 2160 acres. **Extent of Development:** (to Jan. 1, 1936) 685 wells, 594 oil, 3 gas, 88 failures. (During 6 months 1936) none. **Deepest Hole:** United North & South Development Co.'s Kelly 1; total depth 7859 ft; abd in schist topped at 4700 ft; Aug. 3, 1928. **Daily Production Aug. 1, 1936:** 6170 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 72,360,000 bbls ultimate from proven area; 63,155,425 bbls recovered to Jan. 1, 1936; 1,024,903 bbls recovered first 6 months 1936. **Principal Leaseholders:** L. S. Blount, Louis Crouch, Graybury Oil Co., Max Loenig, Magnolia Petroleum Co., Prairie Lee Production Co., Rio Bravo Oil Co., Stronberg & Wolf, The Texas Co. **Remarks:** First Edwards lime field along Balcones faul zone. Crevice area opened by F. L. Thompson's M. F. Lawler 1, May 12, 1933 and located just e of Luling field, included in this field, as is several other crevices in immediate area.

CALHOUN COUNTY

HEYSER

Jose Marie Rios, D. D. Palmer, Agaton Sisneros Surveys, 2 mi n Heyser. **Means of Discovery:** Geophysical survey, geological information. **Discovery Data:** Humble Oil & Refining Co. and Plymouth Oil Co.'s P. H. Welder 2; completed May 28, 1936, flowing 144 barrels 32.8 gravity oil; 7/64-in choke; 500 lbs tubing, 715 lbs casing pressure; total depth 5474 ft; producing horizon 5467½-72½ ft; gas/oil ratio 250/1. **Producing Horizon:** Frio. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 2 failures. (During 6 months 1936) 3 wells, 1 oil, 2 failures. **Deepest Hole:** Humble Oil & Refining Co. and Plymouth Oil Co.'s P. H. Welder 1; total depth 6506 ft; Discorbis 4401-4581 ft; Heterostegina 4731-4943 ft; abd 6506 ft. **Daily Production Aug. 1, 1936:** 135 bbls. **Rigs Running Aug. 1, 1936:** Three. **Market Outlets:** Loading rack at Heyser, pipe line to Refugio planned. **Reserve Data:** 400,000 bbls ultimate from proven area; 5160 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Plymouth Oil Co., Portilla Oil Co., Buchanan & Blanco. **Remarks:** Humble and Plymouth's P. H. Welder A-3 completed September 10, 1936, 1.76 bbls oil per hour, 9/64-in choke, little salt water; 900 lbs tubing, 1650 lbs casing pressure, total depth 4876 ft, producing horizon 4868½-76 ft, 7-in 4866 ft. Opened new sand in Heterostegina zone.

PORT LAVACA

A. Esparza and M. Sanchez Surveys, 2 mi n Port Lavaca. **Means of Discovery:** Reflection seismograph and torsion balance. **Discovery Data:** Steen Drilling Co.'s F. Stanzel 1; completed Nov. 1934; flowing 40 bbls 60 gravity oil and 5,000,000 cu ft gas; total depth 6158 ft. Steinberger Petroleum Corp.'s W. A. Shofner 1; completed April 6, 1935; flowing 525 bbls 41.2 gravity oil, ¼-in choke; 1100 lbs tubing, 1350 lbs casing pressure; total depth 6238 ft; producing horizon 6216-38 ft; elev 25 ft derrick floor. **Geological Data:** Small fault with some folding. **Producing Horizon:** Marginulina. **Producing Area:** 320 acres. **Extent of Development:** (to Jan. 1, 1936) 21 wells, 11 oil, 2 gas, 8 failures. (During 6 months 1936) none. **Deepest Hole:** The Texas Co.'s J. A. Martin 1; abd 6512 ft in Frio, June, 1935. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Wood-Moore Refining Corp. **Reserve Data:** 2,125,000 bbls ultimate from proven area; 161,071 bbls recovered to Jan. 1, 1936; 104,115 bbls recovered first 6 months 1936. **Principal Leaseholders:** The Texas Co., Halliburton Oil Producing Co., Empire Gas & Fuel Co., Steinberger Petroleum Corp.

PRAGUE*

Centering around Section 6, Block C, P. Garcia Survey, 2 mi w Prague. **Means of Discovery:** Geophysical survey. **Extent of Development:** Three failures have been drilled and a fourth is active. The deepest test was Continental Oil Co.'s Moody (American National Realty Co.) 2-A (3) which was junked at 9083 ft, in heaving shale April 10, 1936. The other two wells did not progress to this depth. Fourth well is Austin (Vandenberg) 1, 1 mile n of the first 3 tests, set 11⅝-in csg at 8521 ft and was near 9000 ft on Aug. 1. Continental Oil Co. is employing unusual methods in attempting to overcome the heaving shale in this area. **Principal Leaseholders:** Continental Oil Co. controls many thousand acres in this general area.

SEADRIFT*

Centering around John Ogsberry Survey, 9 mi s Port Lavaca, and 5 mi n Seadrift. **Means of Discovery:** Geophysical survey. **Extent of Development:** Hiawatha Oil Co. (Benedum & Trees) has commenced an 8000-ft test in the center of the 2300-acre John Roemer tract. **Principal Leaseholders:** Hiawatha Oil Co. has nearly 30,000 acres in a solid block.

*Prospect. †Salt dome, no production. ‡Gas field.

DIMMITT COUNTY

CARRIZO SPRINGS*

Centering around the area between L. I. & M. Company sur No. 26 and R. G. Morgandale Sur No. 6, 5 mi nw Carrizo Springs. **Means of Discovery:** Surface indications, trend drilling on Chittim anticline. **Extent of Discovery:** Three wells have been drilled. Humble Oil & Refining Co.'s City National Bank 1-A abd in 1927 at 5004 ft. Had sand with shale streaks 2956-84 ft, sandy shale 2985-2999 ft and shale to 3003 ft. Set 8-in 2942 ft and bailed few gallons 35 gravity oil. Deepened and abd. Several other shows in the Navarro. Topped Taylor marl 3709 ft, Austin chalk 4167 ft. Diamond Half Oil Co. drilled A. Eardley Estate 1 to 4256 ft and Eardley Estate 2 to 825 ft in 1935. The first well had several shows of oil.

DUVAL COUNTY

CHARAMOUSCA

Section 151, 1 mi sw S. R. C. field. **Means of Discovery:** Trend drilling. **Discovery Data:** Sun Oil Co. and Simms Oil Co.'s Warden & Drought 2, completed Sept. 20, 1935, flowing 46½ bbls, ½-in choke, 75 lbs tubing, 160 lbs casing pressure, total depth 1581 ft, producing horizon 1570-81 ft. **Geological Data:** Sand lensing and faulting. **Producing Horizon:** McElroy zone of Jackson age. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 2 wells, 1 oil, 1 failure. (During 6 months 1936) 2 failures. **Deepest Hole:** Magnolia Petroleum Co.'s Duval-Warden, abd 3822 ft, Jan. 6, 1936. **Daily Production Aug. 1, 1936:** Included in S. R. C. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Magnolia Pipe Line Co. **Reserve Data:** Included in S. R. C. field. **Principal Leaseholders:** S. R. C. Oil Corp., Magnolia Petroleum Co., Sun Oil Co., Sinclair Oil Co.

COLMENA

Section 192, 6 mi sw Freer. **Means of Discovery:** Geological information. **Discovery Data:** Mills Bennett Oil Corp.'s Duval County Ranch Co. 1, completed Dec. 15, 1934, initial production 15,000,000 cu ft gas, 525 lbs rock pressure, total depth 3006 ft, producing horizon 1486-1505 ft, plugged to 1280 ft and re-drilled to 1505 ft, casing 1471 ft. **Geological Data:** Sand lens. **Producing Horizon:** Whitsett section of Jackson age. **Producing Area:** 40 acres. **Extent of Discovery:** (to Jan. 1, 1936) 2 wells, 1 gas, 1 failure. (During 6 months 1936) 1 failure. **Deepest Hole:** Mills-Bennett Oil Corp.'s Duval County Ranch Co. 2, abd 3396 ft, May 22, 1935. **Daily Production Aug. 1, 1936:** Shut in. **Rigs Running Aug. 1, 1936:** 1. **Principal Leaseholders:** Mills-Bennett Oil Corp., Conservative Oil Co., The Texas Co., Magnolia Petroleum Co., Sun Oil Co., Santa Clara Oil Co., and other. **Remarks:** Conservative Oil Co.'s Duval County Ranch Co. 2, Aug. 13, 1936, 100 bbls 20 gravity oil, 1554 ft, set casing on bottom and perforate 1516-19 ft. Extended 2 mi se and opened oil production above regular gas sand.

CONCEPCION*†

South half of A. Garcia Survey, 4 mi nw Concepcion. **Means of Discovery:** Magnetometer. **Extent of Development:** Several wells have been drilled in the area the most recent being Benedum & Trees' G. B. Parr 1, abn Aug. 3, 1935, at 6169 ft, without encountering production. It had a few minor shows.

DRISCOLL

Sections 448 and 23. Section 23 of Santa Rosalia Grant, 6 mi n Realitos. **Means of Discovery:** Gas in water wells; geological and geophysical information. **Discovery Data:** Robert Driscoll's Fee 3, completed 1924, 3,000,000 ft gas; total depth 528 ft; sand 523-28 ft, elevation 346 ft. Robert Driscoll's Fee 7, completed Oct. 9, 1927, 15,000,000 cu ft gas, 1500 bbls 22.5 gravity oil; total depth 2468 ft; sand 2448-68 ft. Robert Driscoll's Fee 11, completed April 17, 1930, 40,000,000 cu ft gas, 700 bbls 22.5 gravity oil; total depth 2888 ft; sand 2884-88 ft. Continental Oil Co.'s R. Driscoll Estate 1-A, completed April 27, 1934, 12,000,000 cu ft gas, 200 bbls 33 gravity oil, 90 bbls salt water; total depth 3461 ft; plugged back 3448 ft; 650 lbs tubing, 800 lbs casing pressure. **Geological Data:** Sand lens on local high. **Producing Horizon:** Gas and oil from basal Frio, Fayette or Whitsett, and Hockleyensis. 3450 ft sand corresponds to that producing in Government Wells field. **Producing Area:** 640 acres; 180 acres oil. **Extent of Development:** (to Jan. 1, 1936) 22 wells, 8 oil, 9 gas, 5 failures. (During 6 months 1936) 2 wells, 1 oil, 1 failure. **Deepest Hole:** Continental's R. Driscoll Estate 2-A; total depth 4695 ft, plugged to 3449-59 ft; completed 200 bbls fluid, 30% oil; Aug. 24, 1934. **Daily Production Aug. 1, 1936:** 320 bbls. **Rigs Running Aug. 1, 1936:** 1. **Market Outlets:** Humble Pipe Line Co., Continental Oil Co. **Reserve Data:** 1,080,000 bbls ultimate from proven area; 409,144 bbls recovered to Jan. 1, 1936; 58,376 bbls recovered first 6 months 1936. **Principal Leaseholder:** Continental Oil Co.

EAGLE HILL

Sections 267, 269, 270 and 206, Eagle Hill. **Means of Discovery:** Trend drilling and geological information, based on surface indications and subsurface correlations. **Discovery Data:** Al. Buchanan's Duval Ranch Co. 1; completed Oct. 15, 1933, 500 bbls. 22 gravity oil; total depth 1477 ft, producing horizon 1457-77 ft, elev 552 ft. R. D. Kelly's Foster 5, 200 bbls, total depth 2151 ft, plugged back 2140 ft, top sand 2120 ft. The Texas Co.'s Duval Ranch Co. 7-A, previously had shown for 10,000,000 cu ft gas, spraying oil, at this level, but drilled deeper and was abandoned. **Geological Data:** Sand lensing, with probable fault on west side of field. **Producing Horizon:** Producing from Upper Jackson, first sand locally known as Cole, second Government Wells horizon. **Producing Area:** 800 acres; 340 acres oil. **Extent of Development:** (to Jan. 1, 1936) 34 wells, 20 oil, 2 gas, 12 failures. (During 6 months 1936) 3 failures. **Deepest Hole:** O. W. Killam's J. E. Welder heirs 1; Section 102; abd 2524 ft. **Daily Production,**

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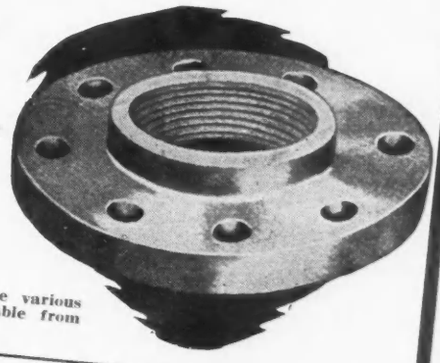

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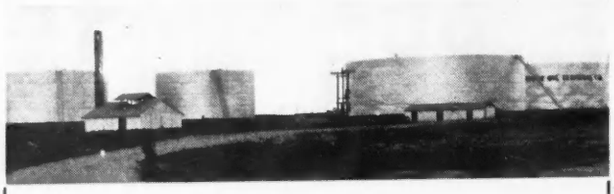

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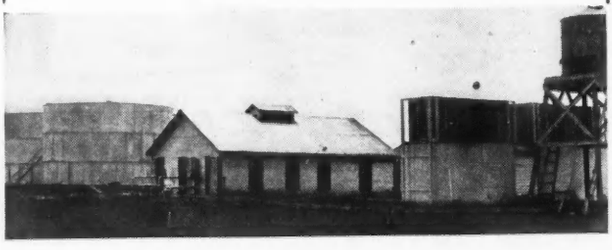


Aug. 1, 1936: 365 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlets:** Magnolia Pipe Line Co., Humble Pipe Line Co. **Reserve Data:** 1,251,000 bbls ultimate from proven area; 368,809 bbls recovered to Jan. 1, 1936; 71,696 bbls recovered first 6 months 1936. **Principal Leaseholders:** Al Buchanan, The Texas Co., Foster Brothers, S. R. & C. Oil Corp., Trinity Drillers, Marzo Oil Co., W. C. McBride, Inc., Eagle Hill Corp. **Remarks:** 2 miles north of this field Buchanan & Tyrell's E. R. Hagist 1, completed Aug. 13, 1932; initial production 6,000,000 cu ft gas, spraying 22 gravity oil, total depth 2144, sand 2110-22 ft, shale 2122-34 ft, sand 2134-44 ft, later drilled deeper to 2505 ft and abd. This field also includes area on northeast side of production referred to frequently as the Hagist pool.

EL MESQUITE

El Mesquite Trinidad Vela Grant, Share 4, 4 mi from sw corner of county. **Means of Discovery:** Geological data based on shows in three failures in immediate vicinity. **Discovery Data:** Rogers & Rogers' Rita S. de Pena 1, completed July 16, 1935, heading 15 bbls 43 gravity oil; total depth 2862 ft, producing horizon 2850-62 ft, elev 670 ft, 7-in casing 2845 ft. **Geological Data:** Sand lens. **Producing Horizon:** Production at Cockfield. Jackson age. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 2 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** J. H. Chandler's R. A. de Pena 1; abd 3450 ft, Oct. 17, 1935. **Daily Production Aug. 1, 1936:** 15 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** None. **Reserve Data:** New field. **Principal Leaseholders:** Rogers & Rogers.

GOVERNMENT WELLS

Including Sections 363, 362, 360, 359, 361, 250, East 60, West 69, 2, 41, 43, 44, 45, 46, 42, 101, 208, 209, 74, 48, 61, 62, 59, 78, 249, 135, 136, 134. Extending north, south and west from Freer. **Means of Discovery:** Geological data. Extensions geological data and trend play. **Discovery Data:** Onyx Oil Co.'s N. G. Norton 1, completed Aug. 22, 1928, 150 bbls 22.5 gravity oil; 6⅝-in choke; total depth 2347 ft, producing horizon 2339-47 ft, elev 609 ft. Seacord & Putnam et al's J. W. Johnson 1, completed March 25, 1932, 10,000,000 cu ft gas 1574 ft, elev 549 ft. **Geological Data:** Sand lensing along apparent shore line, faulting at sand of field. **Producing Horizon:** Oil and gas from Jackson series. Upper gas from Cole sand. Lower oil and gas from Government Wells sand. **Producing Area:** 8000 acres, 7280 acres oil. **Extent of Development:** (to Jan. 1, 1936) 844 wells, 739 oil, 39 gas, 66 failures. (During 6 months 1936) 8 wells, 5 oil, 2 gas, 1 failure. **Deepest Hole:** Magnolia Petroleum Co.'s L. Lundell 1, abd 5858 ft, sand 2317-28 ft showed 15,000,000 cu ft gas and 300 bbls oil. **Daily Production, Aug. 1, 1936:** 15,800 bbls. **Rigs Running, Aug. 1, 1936:** 3. **Market Outlets:** Magnolia Pipe Line Co., Texas Pipe Line Co., Duval Pipe Line Co., Humble Pipe Line Co., Crude Oil Pipe Line Co., and several individual buyers. **Reserve Data:** 71,976,000 bbls ultimate from proven area; 22,544,767 bbls recovered to Jan. 1, 1936; 3,003,294 bbls recovered first 6 months 1936 **Principal Leaseholders:** Byrd Oil Corp., Central Producers, Inc., H. H. Coffield, Hamill & Hamill, Pan-American Production Corp., Humble Oil & Refining Co., Magnolia Petroleum Co., Navarro Oil Co., G. B. Parr, Reynosa Oil Co., San Diego Oil Co., South West Drilling Co., Sun Oil Co., The Texas Co., Whisenant, Trenchard & French, Windsor Oil Co., Bridwell et al, Cox & Hamon, Duval Oil Corp., Government Wells Oil Co., Reed & McKay, Russ Petroleum Corp., Smith & Storey, Al Buchanan, Viola Oil Co., Brown & Nesley, Highland Oil Co., K. O. T. Oil Co., Feliz Oil Corp., Rodney De Lange. **Remarks:** Magnolia Petroleum Co.'s H. Wendt 1, Aug. 19, 1936, 400 bbls, ½-in choke, 600 lbs casing, 200 lbs tubing pressure, total depth 2392 ft, sand 2381-92 ft, 7-in casing 2391 ft. Opened Loma Novia sand production on west side of field.

GRAY RANCH*

Centering Section 7, 5 mi se Seven Sisters. **Means of Discovery:** Geological information. **Extent of Development:** Southern Crude Oil Purchasing Co.'s La Gloria 1, (Gray Ranch) drilled in the ne cor of Section 7, completed as gasser at 639 ft. 4 other tests drilled in the immediate vicinity failed to develop production.

GUAJILLO*†

1¼ mi w Guajillo, 10 mi sw of San Diego, including Section 540. **Means of Discovery:** Geophysical work in 1930 indicated salt dome. **Extent of Development:** Sun Oil Co.'s Moreno 1, Section 540, abd 6902 ft, 1934. It had several oil shows below 6000 ft, topped Jackson 4940 ft, Cockfield 6329 ft, elev 386 ft. Magnolia Petroleum Company interested in development.

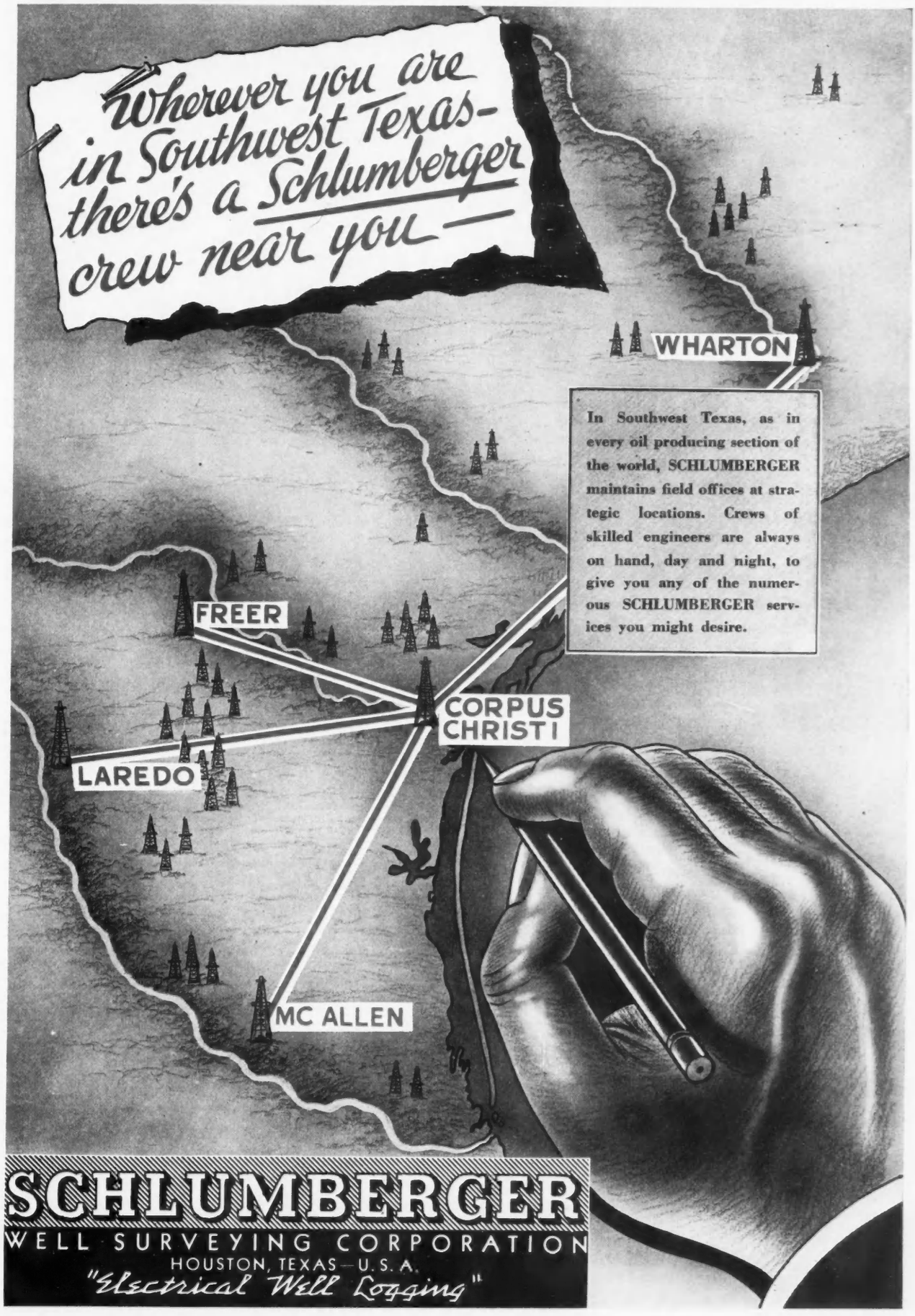
HOFFMAN

Sections 122, 119, 120, 125, 118, 117, and 114, 7 mi s Freer. **Means of Discovery:** Geological information, deeper sand, mainly trend drilling. **Discovery Data:** Conway & Campbell's W. K. Hoffman 1, completed Sept. 10, 1933, 50,000,000 cu ft dry gas; total depth 2757 ft, producing horizon 2749-57 ft, elevation 725 ft. Rogers & Rogers' J. D. Sutherland 1, completed Feb. 18, 1936, 460 bbls 26 gravity oil, ½-in choke; total depth 2885 ft, producing horizon 2865-95 ft, 7-in, 2865 ft, elevation 725 ft. **Geological Data:** Sand lensing, dipping se. **Producing Horizon:** Jackson, upper gas and several oil wells in upper and lower Government Wells sand; main oil in lower Loma Novia sand. **Producing Area:** 1200 acres; 350 acres oil. **Extent of Development:** (to Jan. 1, 1936) 16 wells, 2 oil, 3 gas, 11 failures. (During 6 months 1936) 35 wells, 22 oil, 4 gas, 6 failures. **Deepest Hole:** Rogers & Rogers' Sophie Hoffman 2, total depth 3605 ft, plug back to 2816 ft, perforated 2738-50 ft April 7, 1926; 10,000,000 cu ft, 475 lbs pressure. **Daily Production Aug. 1, 1936:** 940 bbls. **Rigs Running Aug. 1, 1936:** 4. **Market Outlets:** Crude Oil Pipe Line Company, Humble Pipe Line Company. **Reserve Data:** 2,750,000 bbls ultimate from proven area, 5486 bbls recovered to Jan. 1, 1936, 71,833 bbls recovered first 6 months 1936. **Principal Leaseholders:** Reliance Oil & Gas Co., Humble Oil & Refining Co., Rogers & Rogers, Plymouth Oil Co., Duval Oil Corp., Bridwell Oil Corp., Standard of Kansas, Ralph E. Fair, Conway & Campbell.

IGNACIO

Section 211, 6 mi ne Freer. **Means of Discovery:** Trend play, geological data. **Discovery Data:** DeSoto Oil Co., Coronado Oil

*Prospect. †Salt dome, no production. ‡Gas field.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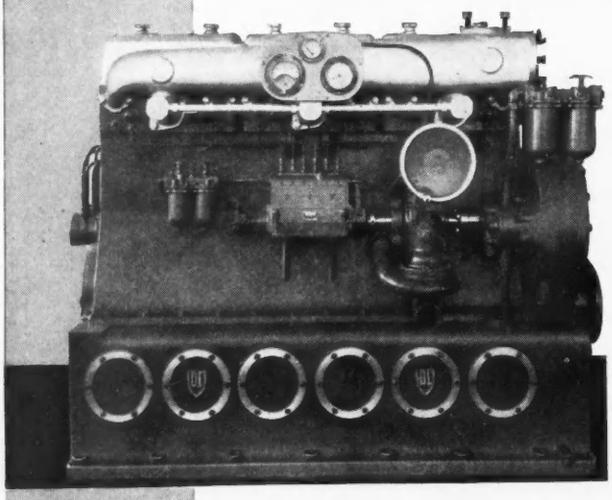

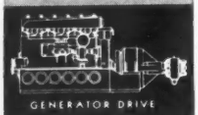

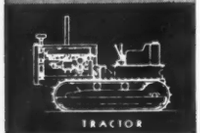

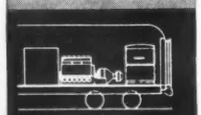

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Co.'s Welder & Wood 1, completed June 20, 1933, 24,000,000 cu ft gas per day; total depth 2500 ft, plugged back 2158 ft, top sand 2115 ft. Casing was leaky and well again plugged back to 2118 ft and completed, elev 540 ft. **Geological Data:** Small sand lens. **Producing Horizon:** Upper Government Wells sand, Jackson age. **Producing Area:** 20 acres, 10 acres oil. **Extent of Development:** (to Jan. 1, 1936) 6 wells, 1 oil, 1 gas, 4 failures. (During first 6 months 1936) none. **Deepest Hole:** The Texas Co.'s P de la Rodriguez, abd 3101 ft, Jan. 30, 1934. **Daily Production:** Included in Government Wells. **Rigs Running:** None Aug. 1, 1936. **Reserve Data:** Included in Government Wells. **Principal Leaseholders:** DeSoto Oil Co., The Texas Co.

KOHLER

Sections 162, 399, 163, 165, 164, 166, 395, 396, 423, 424, 17, 172, 169, 144, 453, 454, 62 and 5, 8 mi n Bruni. **Means of Discovery:** Geological information, trend drilling. **Discovery Data:** Simms Oil Co.'s J. T. Dinn 1, completed June 14, 1926, 30,000,000 cu ft gas; total depth 1760 ft, top sand 1748 ft, elev 780 ft. Humble Oil & Refining Co. and Foster-Reiter Oil Corp.'s V. Kohler 4, completed April 9, 1927, 250 bbls fluid, 30 bbls 24 gravity oil; total depth 2800 ft, sand 2785-2800 ft, elevation 817 ft, sand 2339-51, 2420-32, 2697-2709 ft. **Geological Data:** Sand lensing situation, similar to other fields along Mirando trend. **Producing Horizon:** Hockleyensis zone of Jackson series. Corresponding to Cole, Government Wells and Mirando Sands (local names). **Producing Area:** 5250 acres, 240 acres oil. **Extent of Development:** (to Jan. 1, 1936): 87 wells, 18 oil, 44 gas, 25 failures. (During 6 months 1936) none. Humble Oil & Refining Co.'s V. Kohler 50, Sec 164, abd 7723 ft Aug. 31, 1931, elev 820 ft, sands 1859-87 ft showing oil, salt water and gas; other sands just below 6000 ft. **Daily Production Aug. 1, 1936:** 97 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System, Humble Pipe Line Co. **Reserve Data:** 672,000 bbls ultimate from proven area, 465,858 bbls recovered to Jan. 1, 1936, 17,547 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Reiter-Foster, Simms Oil Co., Chiquita Oil Co., Sun Oil Co.

LABBE‡

Sections 2, 221, 416, and 516, 1½ mi Seven Sisters. **Means of Discovery:** Surface and subsurface work. **Discovery Data:** Magnolia Petroleum Co.'s Emil Labbe 1, completed Nov. 25, 1934, 20,000,000 cu ft gas, 890 lbs rock pressure; total depth 2460 ft; producing horizon 2453-60 ft; 7-in casing 2453 ft. **Geological Data:** Sand lens. **Producing Horizon:** Hockleyensis of Jackson age. **Producing Area:** 600 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 1 oil, 3 gas, 1 failure. (During 6 months 1936) 4 wells, 1 gas, 3 failures. **Deepest Hole:** Stanolind Oil & Gas Co.'s Ira G. Yates 4; total depth 4054 ft, plugged back and set casing 2478 ft, perforated 2446-51 ft, completed 1,140,000 cu ft gas, ¼-in choke, 700 lbs pressure, June 5, 1936. **Daily Production, Aug. 1, 1936:** gas. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** United Gas System. **Principal Leaseholders:** Stanolind Oil & Gas Co., Magnolia Petroleum Co. **Remarks:** One well produced oil several days, but was deepened.

LOMA NOVIA

Sections 73, 72, 41, 554, 101, 64, 62, 553, 63, 67, 70, 68, 114, 62, 78, 77, 84, 83, 72, 76, 60, 59, 75, 71 and 73, ½ mi e Freer. **Means of Discovery:** Flank drilling in known structure. **Discovery Data:** Humble Oil & Refining Co.'s D. Ruiz Estate 1, completed Dec. 27, 1934, 50 bbls 25 gravity oil and 150 bbls salt water; producing horizon 2785-90 ft. **Geological Data:** Local sand lenses on east flank of Government Wells structure. **Producing Horizon:** Jackson formation about 50 to 150 ft below regular Government Wells sand. **Producing Area:** 7000 acres; 6500 acres oil. **Extent of Development:** (to Jan. 1, 1936) 235 wells, 216 oil, 7 gas, 22 failures. (During 6 months 1936) 335 wells, 322 oil, 5 gas, 8 failures. **Deepest Hole:** Magnolia Petroleum Co.'s F. W. Herbst 1; abd 3263 ft, Jan. 7, 1935. **Daily Production, Aug. 1, 1936:** 14,135 bbls. **Rigs Running, Aug. 1, 1936:** 11. **Market Outlets:** Crude Oil Pipe Line Co., Magnolia Pipe Line Co., Humble Pipe Line Co., Texas Pipe Line Co. **Reserve Data:** 60,700,000 bbls ultimate from proven area; 782,644 bbls recovered to Jan. 1, 1936. 2,156,320 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Stieren Oil Corp., Russ Petroleum Corp., Byrd Oil Corp., Frank Gravis, Rodney DeLange, Reynosa Oil Co., Valley Osage Co., Shell Petroleum Co., Smith & Hamill, Magnolia Petroleum Co., Kaffie Lumber Co., Duval Oil Corp., Montour Production Co., Highland Oil Co., Texla Oil Co., Sun Oil Co., Rosan Oil Co., Eastern Texas Petroleum Co. **Remarks:** Several sand lenses at varying depths are found in this field. Some wells are productive in more than one lens.

LOMA VISTA

Section 103, 5½ mi ne Freer. **Means of Discovery:** Discovery well drilled on trend with 2 dry holes which showed saturation. **Discovery Data:** Santa Clara Oil Co.'s J. F. Welder 1-A, completed Feb. 9, 1936, 127 bbls 25 gravity oil; total depth 2921½ ft, producing horizon 2914-21½ ft; 7-in casing 2911 ft. **Geological Data:** Sand lens. **Producing Horizon:** Loma Novia sand, Jackson age. **Producing Area:** 10 acres. **Extent of Development:** (During 6 months 1936) 3 wells, 1 oil, 2 failures. **Deepest Hole:** Shell Petroleum Corp.'s J. F. Welder 1-B, total depth 3242 ft; plugged back to Loma Novia sand to complete. **Daily Production, Aug. 1, 1936:** 33 bbls. **Rigs Running, Aug. 1, 1936:** 2. **Market Outlets:** Crude Oil Pipe Line Co. **Reserve Data:** 45,000 bbls ultimate from proven area. 4076 bbls recovered first 6 months 1936. **Principal Leaseholders:** Pan-American Prod. Corp., Santa Clara Oil Co., Shell Petroleum Corporation, George Coates, Atlantic Oil Producing Co., Darby Petroleum Co.

MAGNOLIA-HAHL*

South central portion Section 51, 3 mi nw Freer. **Means of Discovery:** Geological information. **Extent of Development:** Mag-

*Prospect. †Salt dome, no production. ‡Gas field.

3 HAYSTELLITED BITS *drill* 4,536 ft.

. . no reaming necessary

IN a well at Tomball field, Texas, these three bits drilled from the 958 ft. level to a depth of 5,494 ft. in 103 hr. Bit No. 1 made 3009 ft. in 60 hr. Bit No. 2 in a little over 33 hr. made 1140 ft. Bit No. 3 drilled the final 387 ft. in 9½ hr. All three bits were hard-set with Haystellite inserts and faced with Tube . Haystellite. No reaming was necessary before the casing was set. The hole was out-to-gauge all the way down.

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nolia Petroleum Co.'s C. W. Hahl 1, completed at 4094 ft in sand as gasser spraying little oil. Hahl 2, abd 5362 ft.

PARR RANCH*

Centering around Sections 115, 113, 226 and 277, 7 mi nw San Diego. **Means of Discovery:** Geological information. **Extent of Development:** Intrepid Oil Co.'s (E. R. Thomas et al) Parr 1, abd 4851 ft; Parr 2, abd 5305 ft. Shows around 4000 ft in the Jackson. Parr 2, on drill stem test between 4064-78 ft, showed 4 thribbles of oil, one oil in mud and 6 thribbles of salt water with 50 pounds pressure in 15 minutes. It was drilled to 5305 ft and abandoned June 12, 1935. **Principal Leaseholders:** E. R. Thomas, L. E. Lockhart, Republic Production Co., Intrepid Oil Co., Argo Royalty Co.

PENA‡

Sections 79 and 80, 10 mi e Freer. **Means of Discovery:** Geological information. **Discovery Data:** Stanley Smith (Smith & Hunter's) Pena 1, completed Jan. 31, 1933, 30,000,000 cu ft gas, 700 lbs tubing pressure; total depth 1932 ft, producing horizon 1915-32 ft. **Geological Data:** Small sand lensing structure back up against fault. **Producing Horizon:** Near contact of Frio and Jackson. **Producing Area:** 10 acres. **Extent of Development:** ,to (Jan. 1, 1936) 3 wells, 1 gas, 2 failures. (During 6 months 1936) none. **Deepest Hole:** Stanley Smith's Manuel Oliverez 1, abd 3620 ft, May 10, 1933. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Shut in. **Reserve Data:** Gas. **Principal Leaseholders:** Smith & Hunter, Parr Oil Company.

PIEDRA LUMBRE

Section 100 and 95, 1½ mi nw Government Wells field. **Means of Discovery:** Based on surface fault trace in the immediate vicinity. **Discovery Data:** Magnolia Petroleum Co.'s Duval County Ranch 1, completed Sept. 5, 1935, 312 bbls 22.5 gravity oil, 3/8 in choke, 400 lbs tubing, 600 lbs casing pressure; total depth 2139 ft, producing horizon 2133-39 ft, elev 430 ft. Magnolia Petroleum Co.'s Duval Ranch 3, completed Dec. 28,1935, 40 bbls oil; total depth 1974 ft, producing horizon 1962-74 ft. Magnolia Petroleum Co.'s Duval County Ranch 5, completed Feb. 3, 1936, 20,000,000 cu ft gas, ¼-in choke, 500 lbs tubing, 525 lbs casing pressure; total depth 1331 ft, producing horizon 1324-31 ft. **Geological Data:** Sand lens. **Producing Horizon:** Shallow sand in Cole section, middle sand in Government Wells horizon and lower sand in Loma Novia. All of Jackson age. **Producing Area:** 240 acres. **Extent of Development:** (to Jan. 1, 1936) 4 wells, 3 oil, 1 failure. (During 6 months 1936) 19 wells, 16 oil, 2 gas, 1 failure. **Deepest Hole:** Texas & Ohio Fuel Co.'s Duval Ranch 1, abd 2511 ft, Nov. 6, 1935. **Daily Production, Aug. 1, 1936:** 630 bbls. **Rigs Running, Aug. 1, 1936:** 2. **Market Outlets:** Magnolia Pipe Line Company. **Reserve Data:** 2,208,000 bbls ultimate from proven area. 7,714 bbls recovered to Jan. 1, 1936. 75,196 bbls recovered first 6 months 1936. **Principal Leaseholders:** Magnolia Petroleum Co., Humble Oil & Refining Co., Sun Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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SAN ANTONIO, TEXAS

PIEDRAS PINTAS†

Sections 185, 8, 531, 245, and 12, east central part of county, 2 mi ne Benavides. **Means of Discovery:** Oil seeps. **Discovery Data:** National Oil Co.'s Tinney 1, completed Sept. 10, 1905, 12 bbls 13 gravity oil; total depth 480 ft, producing horizon 460-80 ft; elev 375 ft. Humble Oil & Refining Co.'s Walsh 4, completed Dec. 21, 1925, 2490 bbls 42 gravity oil; total depth 3623 ft, sand and shale section 3597-3623 ft. Tom Graham and Texon Royalty Co.'s G. B. Parr 1, completed Aug. 30, 1934, 25 bbls 50 gravity oil per hour, 1/8-inch choke, 500 lbs working pressure; total depth 3818 ft, plug back 3566 ft; perforated 3462-72 ft, set 7-inch 3584 ft. **Geological Data:** Salt Dome; piercement type. **Producing Horizon:** Shallow zones from 180-580 ft in Catahoula. Lower zone Hockleyensis sand. **Producing Area:** 120 acres. **Extent of Development:** (to Jan. 1, 1936) 59 wells, 25 oil, 34 failures; (During 6 months 1936) 2 failures. **Deepest Hole:** Humble Oil & Refining Co.'s Walsh et al 7, Section 185, abd 4502 ft; sands 3821-25 ft and 4485-4502 ft. **Daily Production, Aug. 1, 1936:** 10 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Rail. **Reserve Data:** 150,000 bbls ultimate from proven area. 142,021 bbls recovered to Jan. 1, 1936. 574 bbls recovered first 6 months 1936. **Principal Leaseholders:** Tom Graham and Texon Royalty Co., Cabildo Oil Properties, Humble Oil & Refining Co. **Remarks:** Except for a few shallow pumpers, field is dormant.

PALANGANA†

Sections 4, 247, 245, 81, 82, 241, 255, 2 and 3, 2 mi n Noleda. **Means of Discovery:** Geological core drilling and sulphur structure. **Discovery Data:** National Oil Co.'s R. Schallert 1, completed June 30, 1928, pumping 30 bbls 16 gravity oil; total depth 452 ft, producing horizon 450-52 ft, elev 497 ft. **Geological Data:** A piercement type salt dome, 3000 ft uplift. **Producing Horizon:** Oil in Catahoula (Marine Miocene). **Producing Area:** 15 acres. **Extent of Development:** (to Jan. 1, 1936) 77 wells, 4 oil, 74 failures. (During 6 months 1936) none. **Deepest Hole:** Humble Oil & Refining Co.'s Singer 4, Section 247, abd 4440 ft, June 5, 1923. **Daily Production: Aug. 1, 1936:** None. **Rigs Running Aug. 1, 1936:** One. **Market Outlets:** Trucks. **Reserve Data:** 3635 bbls ultimate from proven area; 3635 bbls recovered to Jan. 1, 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Southern Alkali Corp., Frank Gravis, J. U. Edwards, Texas Gulf Sulphur Co. **Remarks:** This field has had a couple of shallow wells which made some oil for a time. Was actively explored by Union Sulphur Co. Used by The Southern Alkali Co. which has an 8-inch lime line from the field to Corpus Christi. Frank J. Gravis et al's Schallert 1-A, Sept. 12, 1936, flowed 2000 bbls 45 gravity oil, total depth 2730 ft, sand 2730-44 ft, opens new producing horizon.

RANCHO SOLO‡

Section 157, 18 mi sw from Freer. **Means of Discovery:** Geological Information. **Discovery Data:** California Co.'s Gruy 1, completed Nov. 27, 1935, 25,000,000 cu ft gas, 800 lbs pressure; total depth 3777 ft, producing horizon 2555-69 ft, plugged 2575 ft, perforated 2555-69 ft, set 5½-inch 2625 ft. **Geological Data:** Sand lens. **Producing Horizon:** Government Wells sand, top of Cole 1809 ft. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 2 wells, 1 gas, 1 failure. (During 6 months 1936) 1 gasser. **Deepest Hole:** Discovery well. **Daily Production, Aug. 1, 1936:** gas. **Rigs Running, Aug. 1, 1936:** None. **Principal Leaseholders:** California Company, George Coates, Rio Bravo Drilling Co. **Remarks:** Rio Bravo Drilling Co. and George Coates' W. R. Peters 1-A, June 10, 1936, 10,000,000 cu ft gas, total depth 2989 ft, plugged back 1807-18 ft. Established Cole sand production, which now is producing oil.

SARNOSA

Sections 574, 576, 130, 127, 5 mi sw Freer. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Capps & Smith's Duval County Ranch Co. 1, completed Apr. 19, 1932, 50,000,000 cu ft gas, spraying small quantity of 22 gravity oil; total depth 2412 ft, sand and shale series 2350 ft to total depth, elev 646 ft. **Geological Data:** Sand lensing and faulting. **Producing Horizon:** Hockleyensis zone of Jackson series, locally called Lower Government Wells horizon. **Producing Area:** 660 acres, 590 acres oil. **Extent of Development:** (to Jan. 1, 1936) 63 wells, 44 oil, 5 gas, 14 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** The Texas Co.'s D. Ruiz 2, Section 127, abd 2816 ft, Aug. 1, 1932. **Daily Production Aug. 1, 1936:** 906 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Magnolia Pipe Line Co., Duval Pipe Line Co. **Reserve Data:** 3,762,000 bbls ultimate from proven area; 1,205,140 bbls recovered to Jan. 1, 1936; 171,351 bbls recovered first 6 months 1936. **Principal Leaseholders:** Wertheimer Oil Co., Sea Port Oil Co., The Texas Co., Magnolia Petroleum Co., Sarnosa Oil Corp., Sun Oil Co.

SEVEN SISTERS

Surveys 226, 308, 118, 225, 224, 384, 382, 386, 385, 384, 383, 381, 102, 220, 113 and 591, 2 mi s of center of north line of county. **Means of Discovery:** Based on both surface and subsurface work. **Discovery Data:** Harvey & Henderson's Chernoskey 1, completed May 13, 1935, pumping 73 bbls 20.5 gravity; total depth 2650 ft, producing horizon 2220-25 ft, elev 534 ft. Santa Clara Oil Co.'s Welder Heirs 1, completed June 4, 1935, flowing 682 bbls 22 gravity oil, ¼-in choke, 625 lbs tubing, 825 lbs casing pressure; total depth 2481 ft, producing horizon 2473-81 ft, elev 513 ft. Westheimer & Daube's Z. Campos 2, completed Jan. 16, 1936, flowing 600 bbls oil, 3/8-in choke, 200 lbs tubing, 500 lbs casing pressure; total depth 2687 ft, producing horizon 2672-87 ft. **Geological Data:** Sand lensing on monocline. **Producing Horizon:** Upper sand locally called Chernoskey (Hockleyensis of Jackson age). A second sand in Government Wells horizon, third in Loma Novia horizon, all of Jackson Age. **Producing Area:** 2750 acres, 2630 oil. **Extent of Development:** (to Jan. 1, 1936) 51 wells, 45 oil, 6 failures. (During 6 months 1936) 193 wells, 176 oil, 4 gas, 13 failures. **Deepest Hole:** Atlantic Oil Production Co.'s J. F. Welder 2-E, abd 3168 ft, Apr. 11, 1936. **Daily**

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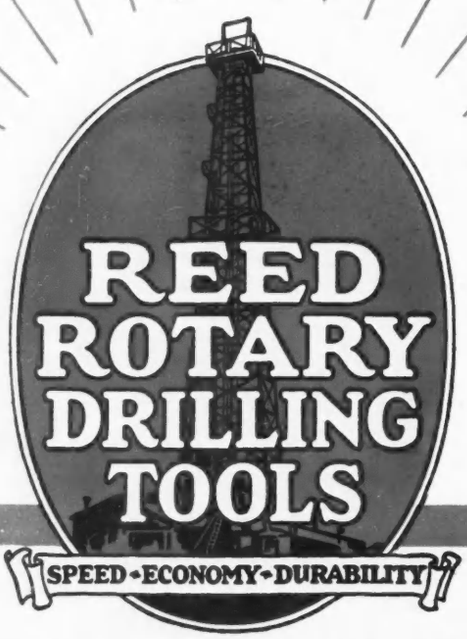

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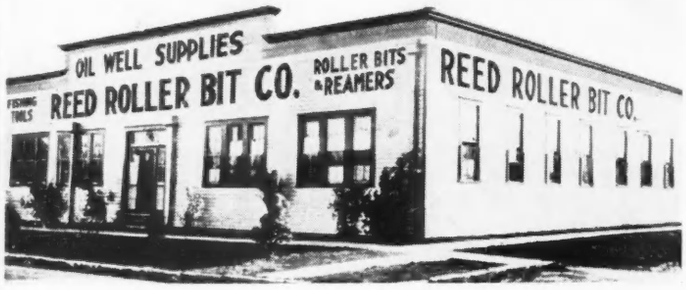
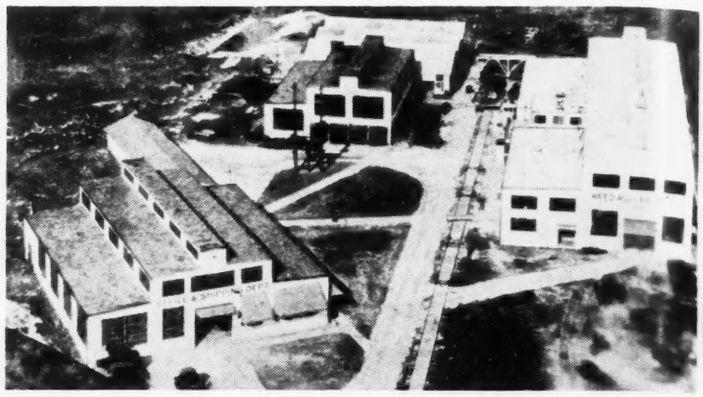
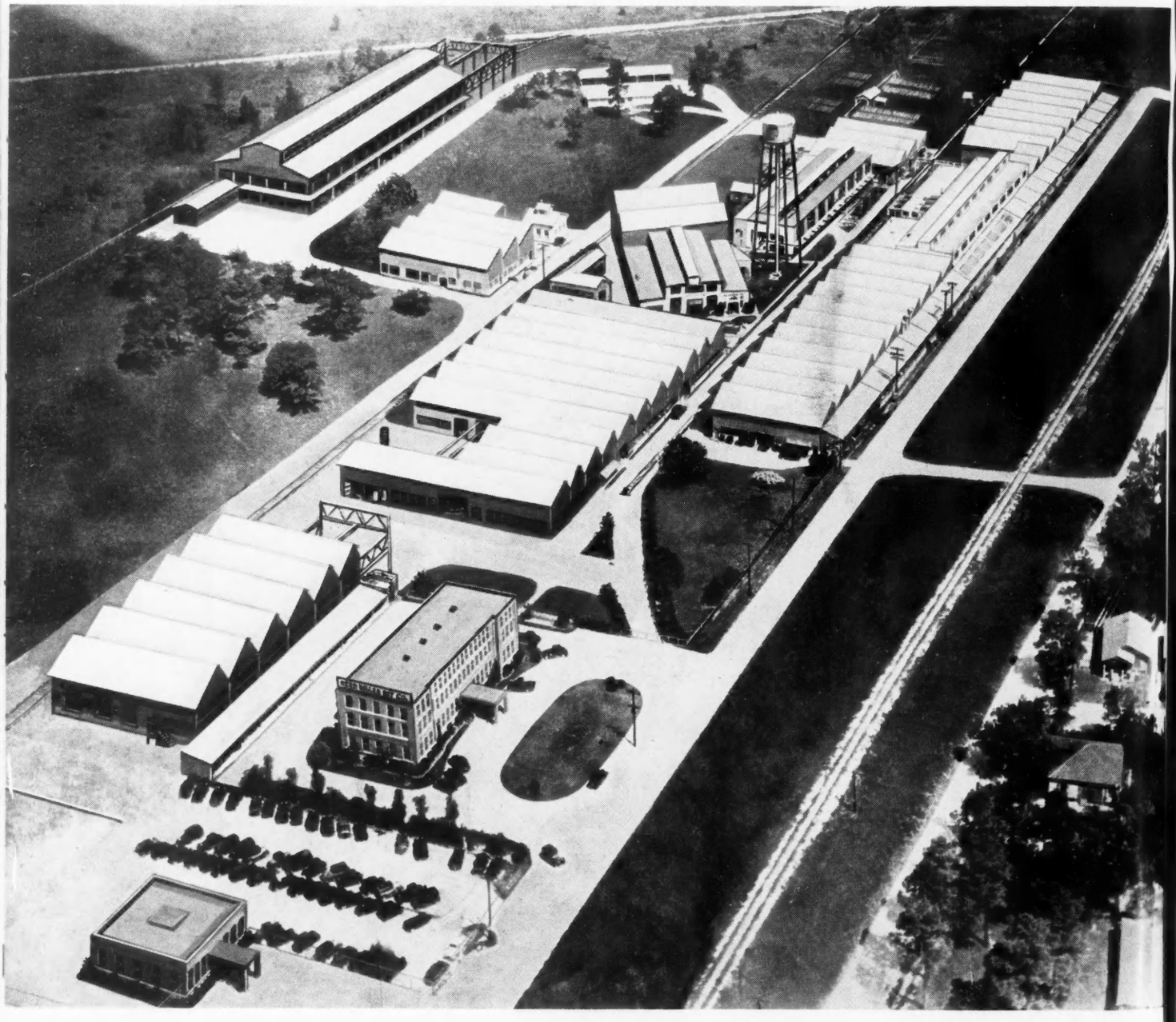


REED ROLLER BIT CO.
1917



REED ROLLER BIT CO.
1924



REED ROLLER BIT CO.
1936

Production Aug. 1, 1936: 6058 bbls. **Rigs Running Aug. 1, 1936:** 18. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 27,615,000 bbls ultimate from proven area; 125,663 bbls recovered to Jan. 1, 1936; 657,624 bbls recovered first 6 months 1936. **Principal Leaseholders:** Atlantic Oil Producing Co., Darby Petroleum Corp., Santa Clara Oil Co., Pan American Producing Corp., Reliance Oil & Gas Co., Harvey & Henderson, Parr Oil Co., Humble Oil & Refining Co., Navarro Oil Co., Illinois Petroleum Co., Bianco & Buchanan, Dulce Oil Co., Cox & Hamon, Westheimer & Daube, J. K. Kleiner, Diamond Half Oil Co., Shell Petroleum Corp.

S R C

Section 293, 9 mi nw Freer. **Means of Discovery:** Geological information. **Discovery Data:** S. R. & C. Oil Corp. et al's Duval County Ranch Co. 1, completed Sept. 23, 1930, flowing 300 bbls 20.8 gravity oil; total depth 1740 ft, producing horizon 1731-40 ft. **Geological Data:** Monoclinal fold. **Producing Horizon:** McElroy of Jackson age. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 6 oil, 5 failures. (During 6 months 1936) none. **Deepest Hole:** The Texas Co.'s Duval County Ranch Co. 1, abd 2331 ft. **Daily Production Aug. 1, 1936:** Shut in. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Magnolia Pipe Line Co. **Reserve Data:** 284,000 bbls ultimate from proven area; 199,509 bbls recovered to Jan. 1, 1936; 4914 bbls recovered first 6 months 1936. **Principal Leaseholders:** The Texas Co., Magnolia Petroleum Co., S. R. & C. Oil Corp.

REALITOS*

Centers 2 mi se Realitos, Santos Garcia Survey. **Means of Discovery:** Geophysical information, geological study. **Extent of Development:** Several shallow wells drilled. Shell Petroleum Corp. had evidence of probable salt dome in work done about 1930.

EDWARDS COUNTY

HOLLMAN*

Centering around a point on Sutton County line near Val Verde County line. **Means of Discovery:** Surface geology. **Extent of Development:** Phillips Petroleum Co. has drilled 4 wells. Cusenberry 1 abd 1035 ft, Cauthorn abd 975 ft, Hollman 1 abd 6635 ft; elev 2247 ft, Pennsylvanian topped 3485 ft. Hollman 2 abd 8230 ft; elev 2250 ft, Pennsylvanian 3485 ft, Ordovician 7565 ft. It had a number of shows of gas.

PETERSON*

Centering around Wyatt Survey, just w of the nw corner of Real County, but in Edwards County. **Means of Discovery:** Surface geology. **Extent of Development:** K. K. Stout drilled Peterson 1 and 2 in 1926, going to 2850 ft and 4600 ft, respectively. Gas shows encountered around 3910 ft. James Dalglish's Peterson drilled to 5206 ft and got top Ellenberger below 4250 ft. It has gas shows between 3905-50 ft. Transcontinental Oil Co.'s Peterson 1 drilled to 3962 ft, elev 2360 ft, topped Pennsylvanian 1400 ft.

WHITEHEAD*

Centering around an area on Val Verde County line and about 12 mi s of n line of county. **Means of Discovery:** Surface geology. **Extent of Development:** Magnolia Petroleum Co. drilled two wells. Whitehead 1 went to 6725 feet, elev 1770; Whitehead 2 abd at 3502 ft, elev 1896 ft; E. H. Green et al's Whitehead abd 3500 ft and has several shows one just above total depth. Several wells drilled to Glenrose-Trinity series above 1000 ft, showed a little thick heavy oil.

FRIO COUNTY

BIG FOOT*

Centering around Section 139, near Bigfoot in ne corner of county. **Means of Discovery:** Geological information, known faulting in area evidenced at surface. **Extent of Development:** Wray & Dunbar's Burns 1, drilled early in 1931, blew out at 2311-68 ft showing about 1000 lbs pressure with little gas, deepened to 3708 ft in Edwards lime topped at 3662 ft, showing oil stains, but developing sulphur water, elev 643 ft. Shoemaker et al drilled M. Roach Estate 1 to 2390 ft where it developed 600 lbs pressure, a little oil and gas, abd 4005 ft, July 18, 1935. Gas showings in Navarro-Taylor section.

DOERING

M. L. Carranza Survey 302, 20 mi sw Pearsall. **Means of Discovery:** Geological and geophysical information. **Discovery Data:** Amerada Petroleum Corp.'s F. Doering 1, Apr. 4, 1934, 1,400,000 cu ft gas; total depth 6507 ft, 7-in 6060 ft, milled out 5971 ft, sidetrack and drilled to 6459 ft after plugging back original hole. **Geological Data:** Local high on anticline. **Producing Horizon:** Del Rio, Buda and Georgetown lime. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well. (During 6 months 1936) none. **Daily Production Aug. 1, 1936:** Gas shut in. **Rigs Running Aug. 1, 1936:** None. **Principal Leaseholders:** Rycade Oil Corp., and Amerada Petroleum Corp.

MUDFORD*

Centering around Section 1, B S & F Survey, 12 mi se Pearsall. **Means of Discovery:** Core drilling, geophysical work in general area. **Extent of Development:** None. **Principal Leaseholders:** Mudford Oil Co. has 11,000 acres under lease and Humble Oil & Refining Co. has larger block in vicinity.

*Prospect. †Salt dome, no production. ‡Gas field.

PEARSALL

S. Blain, Jose Arocha, J. M. Figerina, San Antonio Ditch Co., J. B. Mason, A. Lynch, S. Glenn and others, 4 mi sw Pearsall. **Means of Discovery:** Geological work, core drilling, geophysical work. **Discovery Data:** Amerada Petroleum Corp.'s Halff & Oppenheimer 2, Dec. 26, 1934, ½-in choke, 360 lbs tubing, 890 lbs casing pressure; total depth 10,050 ft, producing horizon 3907-25 ft, elev 540 ft; plugged back 3925 ft, casing ripped 3907-15 ft, flowed 8,000,000 cu ft gas, 139 barrels fluid, part 24 gravity oil and salt water. Amerada Petroleum Corp.'s W. H. Smith 1, Aug. 17, 1935, 815 bbls 39.6 gravity oil, 22/64-in choke, 500 lbs casing pressure; total depth 6238 ft, 7-in 6085 ft, plugged back 6082 ft and perforated 5920-27 ft. Produced several months then plugged back and perforated 5350-85 ft, made 2055 bbls oil, ¾-in choke. Amerada Petroleum Corp.'s Arthur Michaels 1, Jan. 3, 1936, 2750 bbls 28 gravity oil, 1,200,000 cu ft gas, 1-in choke, 600 lbs tubing, 1400 lbs casing pressure; total depth 5640 ft, producing horizon 5292-5640 ft, elev 505 ft (open flow estimate 15,000 bbls per day). **Geological Data:** Elongated dome with fractured chalk section. **Producing Horizon:** 3900 ft, Navarro sand; 5600 ft, Austin chalk; 5900 ft, Buda lime. **Producing Area:** 2000 acres. **Extent of Development:** (to Jan. 1, 1936) 8 wells, 5 oil, 3 failures. (During 6 months 1936) 11 wells, 10 oil, 1 failure. **Deepest Hole:** Discovery well. **Daily Production Aug. 1, 1936:** 1325 bbls. **Rigs Running Aug. 1, 1936:** Four. **Market Outlets:** Amerada Rycade Oil Corp. has gathering system to railroad Melon, trucks. **Reserve Data:** 22,500,000 bbls ultimate from proven area; 26,966 bbls recovered to Jan. 1, 1936; 157,780 bbls recovered first 6 months 1936. **Principal Leaseholders:** Amerada, Rycade. **Remarks:** Deepest test in South Texas drilled in this field; shows in Navarro, Austin chalk, Buda lime, Edwards lime, Glenrose lime and Trinity sand.

SCHATTEL*

Extending ne from Pearsall to Schattel. **Means of Discovery:** Considerable geophysical work done. Core drilled with 30 core holes ranging down to 2000 ft. **Principal Leaseholders:** Humble Oil & Refining Co. has in excess of 25,000 acres under lease.

WOODWARD*

E. Poor Survey 14, extreme nw corner county. **Means of Discovery:** Geological information. **Extent of Development:** Humble Oil & Refining Co.'s C. B. Woodward 1, abd 1934 as result fishing job at 1800 ft. No. 2, 25 feet away, drilled to 2873 ft, 40 ft in Edwards lime, tested 300 ft sulphur water in 30 minutes, showed serpentine from 1783 ft to 1909 ft, abd Apr. 15, 1934.

GOLIAD COUNTY

CABEZA CREEK*

S. Vela and M. de J. Yarbo, 2 mi ne Charco. **Means of Discovery:** Geological information led to original drilling. Geophysical work done later. **Extent of Development:** V. F. Neuhaus' J. E. Pettus 1, abd at 3853 ft, taken over by John F. Camp and Southern Crude Oil Purchasing Co. and deepened to 4386 ft, plugged back to 4298 ft and completed July 25, 1931 flowing 8,000,000 cu ft gas spraying 110 barrels of fluid, 70% salt water and remainder high gravity oil through ¼-in choke at 4293-98 ft. It was in the Pettus sand (Cockfield). Three more wells drilled by Camp and Stanolind Oil & Gas Co., all abd. Thompson Drilling Co.'s Pettus 1, 1100 ft se of the discovery, abd Mar. 15, 1936, 4751 ft after shows at 4601-09 ft in Yegua.

FANNIN*

Centering around Daniel O'Driscoll and Gertrude Barrera Surveys, 4 mi nw Fannin. **Means of Discovery:** Geophysical and geological work. **Extent of Development:** Gibson Oil Co. and Benedum & Trees' G. B. Parks 1 later taken over by Plymouth Oil Co., abd 5267 ft. In Dec., 1930, plugged back to 4520-41 ft, completed 3,000,000 cu ft gas. Plymouth then drilled another well, but had the same trouble around 5000 ft, not being able to get through heaving shale and abd. Claude Morgan et al's Mrs. W. O. Maetze 1 active at this time. The well ran an electric formation tester at 4547 ft and showed sands at 3380-3412 ft and 3581-3698 ft; scheduled to set casing contract depth, 5800 ft, then test upper sands through perforations; elev 177 ft, Jackson 4160 ft, Cadell 5066 ft, Diboll 5210 ft. **Principal Leaseholders:** Claude Morgan, Sun Oil Co., Atlantic Oil Producing Co., Felmont Oil Corp.

HORDS CREEK

G. Southerland Survey. **Means of Discovery:** Geological information, trend play, surface indications of faulting. **Discovery Data:** F. P. Zoch et al's J. R. Kauffman 1, completed Dec., 1929, 12,000,000 cu ft wet gas, ¼-in choke; 1500 lbs tubing, 1600 lbs rock pressure; total depth 4232 ft, sand 4216-32 ft. Brown & Wheeler's Kauffman 1, completed Aug. 1, 1935, flowing 225 bbls 47.6 gravity oil, 1/8-in choke; 1375 lbs tubing, 1500 lbs casing pressure; total depth 4538 ft, producing horizon 4533-38 ft; elev 285 ft. (Later deepened to 4581 ft, plugged back 4556 ft, recompleted. **Geological Data:** Sand lens backed up against faulting. **Producing Horizon:** Cockfield (Pettus) gas; Yegua (Conroe) oil. **Producing Area:** 80 acres; 40 acres oil. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 2 oil, 1 gas, 6 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Tidal Oil Co.'s Mrs. F. Ray Pesira 1, abd 6004 ft. **Daily Production, Aug. 1, 1936:** 60 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** 180,000 bbls ultimate from proven area; 4284 bbls recovered to Jan. 1, 1936; 10,087 bbls recovered first 6 months 1936. **Principal Leaseholders:** Sun Oil Co., Brown & Wheeler, Slick-Urschel Oil Co., Phillips Petroleum Co., Magnolia Petroleum Co., Continental Oil Co.

LA BAHIA*

Centering around block 25 Goliad town tract, Section 4, 2 mi s Goliad. **Means of Discovery:** Cotton Belt Oil & Gas Co.'s M. Luten-

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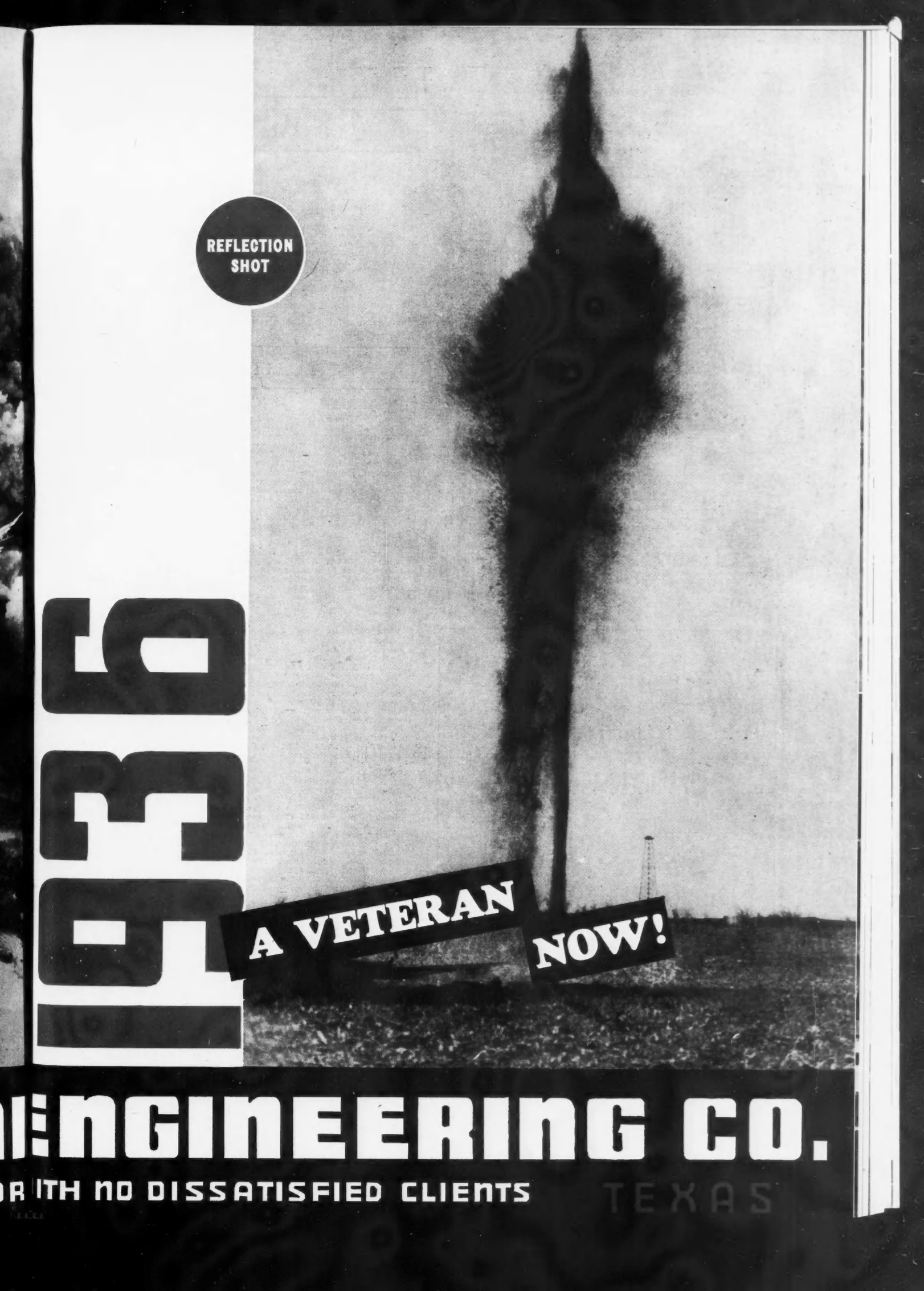

IGS

NGINEERING CO.

OR ITH NO DISSATISFIED CLIENTS

TEXAS

bacher 1, blew out April 14, 1936, at 5545 ft, and stuck drill stem. It made considerable gas and showed a little oil. Zeni Oil & Gas Co.'s M. Lutenbacher 3, set 7-in casing at 5352 ft, and blew out at 5369 ft apparently in Pettus sand. It is testing 5550-ft horizon found in the first test. Vicksburg was encountered at about 3720 ft and Hockleyensis at 4450 ft. **Principal Leaseholders:** Cotton Belt Oil & Gas Co., Zeni Oil & Gas Co., Santa Clara Oil Co., Shell Petroleum Corp., Houston Oil Co., American Oil Co., Randon Oil Co.

MANHUILLA CREEK*

Centering around W. R. Smith Survey, 6 mi nw Goliad. **Means of Discovery:** Geological survey. Some geological work done in the general area. **Extent of Development:** Thompson Drilling Co.'s H. Taylor Est. 1, abd Feb. 3, 1936, 5301 ft; sand 4980-5023 ft developed 35 lbs pressure and 360 ft mud cut with oil on drill-stem test, 3/8-in choke; elev 270 ft, Hockleyensis 4055 ft, top Yegua 5020 ft.

SARCO CREEK*

Centering around M. J. Rios Survey, 3 mi n Sarco Creek, 10 mi s Goliad. **Means of Discovery:** Geological information. Some geophysical work has been done in this general area. **Extent of Development:** Two tests drilled by Keystone Royalties Co. on C. B. Wood tract. First drilled to 5961 ft, as a gasser through drill stem from sand at 5956-61 ft; 650 lbs pressure through 3/8-in choke, 1425 lbs closed-in; showed little 47.9 gravity oil; elev 135 ft. Marine Oligocene 2820 ft, Heterostegina 3252 ft, Vicksburg 4678 ft, Hockleyensis 5493 ft; abd July 25, 1935, after blowout. Second test set casing at 5984 ft after finding sand at 5975-84 ft; failed to produce through perforations and drilled to 6702 ft, plugged back and shot with nitro at 5946-54 ft, where it built up pressure of 1475 lbs shut in; pressure dropped to 50 lbs when opened, abd.

SLICK

Obid Marshall Survey, 8 mi se Nordheim, DeWitt County line. **Means of Discovery:** Geological information. **Discovery Data:** T. B. Slick et al's W. L. C. Poetter 1, Dec 22, 1930, 545 bbls 48 gravity oil and 10,000,000 cu ft gas, ¼-in choke; total depth 4213 ft; producing horizon 4199-4213 ft, elev 322 ft. **Geological Data:** Folding and faulting; three east-west faults cut structure. **Producing Horizon:** Pettus sand of Cockfield section of Jackson. **Producing Area:** 150 acres; 10 acres oil. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 1 oil, 2 gas, 8 failures. (During 6 months 1936) none. **Deepest Hole:** T. B. Slick et al's W. H. Reidel 1, abd 4574 ft in Yegua, April 18, 1931. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** None. **Reserve Data:** 69,270 bbls ultimate from proven area; 69,270 bbls recovered to Jan. 1, 1936; no oil first 6 months 1936. **Principal Leaseholders:** Southwestern Development Synd., Slick-Seeligson Corp.

*Prospect. †Salt dome, no production. ‡Gas field.

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GONZALES COUNTY

OTTINE

Winslow Turner, James Ruth, J. G. Webb, W. Smith Surveys, 4 mi e Luling. **Means of Discovery:** Geological information. **Discovery Data:** Empire Oil & Gas Co. (Sullivan) R. M. Norwood 1, Dec. 19, 1928, 350 bbls 32.7 gravity oil; total depth 4176 ft, crevice 3765-79 ft, 6⅝ casing 3725 ft, went dead, deepened to 4296 ft, abd. **Geological Data:** Production on upthrow side of ne-sw fault, several cross faults in vicinity of field. **Producing Horizon:** Shallow production from Navarro sand, deeper from crevice in top of Austin chalk. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 7 wells, 1 oil, 6 failures. (During 6 months 1936) none. **Deepest Hole:** J. J. Elam et al, abd 4407 ft. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** One. **Reserve Data:** 24,635 bbls ultimate from proven area; 24,635 bbls recovered to Jan. 1, 1936; none first 6 months 1936. **Principal Leaseholders:** E. B. Starkey, Russell Oil Co., J. J. Elam, M. S. Holliday, Simms Oil Co., United North & South Development Co., Earl S. Post. **Remarks:** Starkey et al's Brown et al 1, testing showings at 1442-47 ft.

GUADALUPE COUNTY

DARST CREEK

15 mi e Seguin, Green Dewitt, Jacob Darst and other surveys. **Means of Discovery:** Geological information, drilling along fault. **Discovery Data:** The Texas Co.'s Dallas Wilson 1, completed July 10, 1929, 2000 bbls 36.3 gravity oil, 1-in choke, 2610 ft; producing horizon 2605-10 ft; elev 525 ft. **Geological Data:** Long narrow producing strip of production on upthrow side of faulting; producing horizon 25 to 45 ft in thickness. **Producing Horizon:** Edwards lime. Some crevices in Austin chalk and intermediate sections to Edwards lime. **Producing Area:** 1725 acres. **Extent of Development:** (to Jan. 1, 1936) 314 wells, 286 oil, 28 failures. (During 6 months 1936) none. **Deepest Hole:** Magnolia Petroleum Co.'s C. N. Adams 1, abd 3614 ft. **Daily Production, Aug. 1, 1936:** 8555 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Gulf Pipe Line Co., Humble Pipe Line Co., Magnolia Pipe Line Co., Texas Pipe Line Co., Humble Oil & Refining Co. gathering system. **Reserve Data:** 69,000,000 bbls ultimate from proven area; 36,332,908 bbls recovered to Jan. 1, 1936; 1,615,811 bbls recovered first 6 months 1936. **Principal Leaseholders:** Abercrombie & Harrison, Empire Gas & Fuel Co., Grayburg Oil Co., Horner & Crouch, Humble Oil & Refining Co., La Jita Corp., Magnolia Petroleum Co., Penn Oil Co., Sun Oil Co., The Texas Co., H. H. Weinert et al, Gulf Oil Corp.

MANFORD

James Hodges Survey, 7 mi s Luling. **Means of Discovery:** Geological information, trend drilling on known fault. **Discovery Data:** Penn Oil Co. (Simms Oil Co.), J. Manford 1, Nov. 31, 1929, 450 bbls 37.3 gravity oil, ½-in choke; total depth 2418 ft, producing horizon 2414-18 ft; elev 442 ft. **Geological Data:** Crevices on upthrow side of fault. **Producing Horizon:** Austin chalk. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 8 wells, 4 oil, 4 failures. (During 6 months, 1936) 1 oil well. **Deepest Hole:** Sun Oil Co.'s J. Manford 1, abd 2981 ft in Edwards lime. **Daily Production, Aug. 1, 1936:** 32 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Magnolia Pipe Line Co. **Reserve Data:** 460,000 bbls ultimate from proven area; 359,930 bbls recovered to Jan. 1, 1936; 6013 bbls recovered first 6 months 1936. **Principal Leaseholders:** R. C. Robbins, Simms Oil Co.

SAL-MAR

L. Bollinger Survey, 9 mi e Seguin. **Means of Discovery:** Geological data. **Discovery Data:** Sal-Mar Oil Co.'s A. H. Zunker 1, June 15, 1932, 400 bbls oil, ¾-in choke; total depth 2042 ft, producing horizon 2022-42 ft, top Austin chalk 2022 ft. **Geological Data:** Crevice on fault. **Producing Horizon:** Austin chalk. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 1 oil, 8 failures. (During 6 months 1936) none. **Deepest Hole:** Brogan & Wormser's F. A. Pfullman 1, abd 2364 ft. **Daily Production, Aug. 1, 1936:** abd. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** None. **Reserve Data:** None; 10,750 bbls recovered to Jan. 1, 1936; none recovered first 6 months 1936. **Principal Leaseholders:** Acreage unleased.

SOUTH DARST CREEK

J. K. Davis, Green DeWitt Surveys, 9 mi se Seguin. **Means of Discovery:** Trend play, geological data. **Discovery Data:** J. E. Clark's W. B. (Katie) Lay 1, Aug. 7, 1935, pumping 350 bbls 34.5 gravity oil; total depth 2446 ft, producing horizon 2372-2446 ft, elev 450 ft. **Geological Data:** Crevice area on main Darst Creek faulting. **Producing Horizon:** Broken Austin chalk. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 3 oil wells. (During 6 months, 1936) 5 oil wells. **Deepest Hole:** Doody Oil Co.'s Lay 2, total depth 2606 ft, plugged back 2446 ft and completed March 5, 1936, pumping 215 bbls oil per day. **Daily Production, Aug. 1, 1936:** 320 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 200,000 bbls ultimate from proven area; 14,988 bbls recovered to Jan. 1, 1936; 72,835 bbls recovered first 6 months 1936. **Principal Leaseholders:** Ramona Oil Co., Stagal Oil Co., J. E. Clark, Amy Oil Co., Doody Oil Co.

STAPLES

Cyrus Campbell Survey, ⅛ mi n Staples. **Means of Discovery:** Geological data, trend drilling along fault. **Discovery Data:** Henadena Oil Co.'s Lowman 1, completed Oct. 9, 1935, 10 bbls oil; total depth 720 ft, producing horizon 694-720 ft. **Geological Data:** Fractured area along upthrow side of fault. **Producing**

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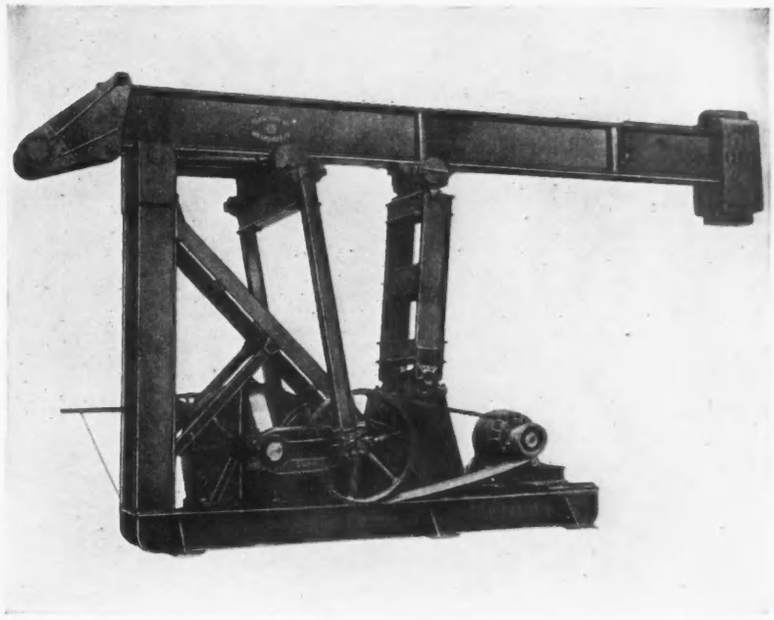

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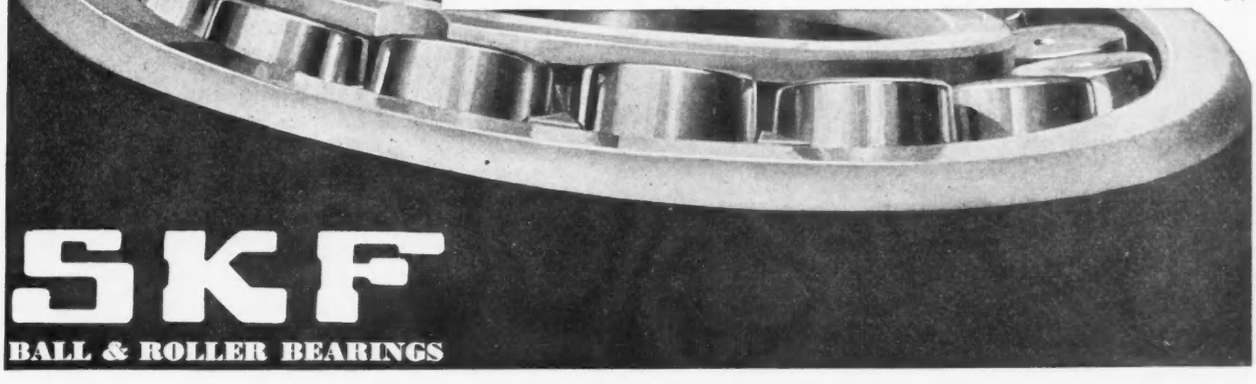

SKF

BALL & ROLLER BEARINGS

Horizon: Austin chalk. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 3 oil, 2 failures. (During 6 months 1936) 4 failures. **Deepest Hole:** H. P. Suggs et al's Sherrill 1, abd 1262 ft in lime, Apr. 1, 1936. **Daily Production, Aug. 1, 1936:** 4 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** 8000 bbls ultimate from proven area; 1000 bbls recovered to Jan. 1, 1936; 725 bbls recovered first 6 months 1936. **Principal Leaseholder:** Hopkins Brothers.

TIDAL-SELIGMAN*

N. J. Williamson Survey, 10 mi s Seguin. **Means of Discovery:** Trend drilling on known fault and geological information. **Extent of Development:** Tidal Oil Co.'s J. Seligman 1, blew out from a crevice in the Austin chalk at 2464-67 ft after topping Austin chalk 2 ft higher. It was killed, 8⅛-in casing set at 2462 ft and completion attempted at 2510 ft; made 750 bbls oil, went dead, deepened to 2804 ft, abd June 11, 1930.

ZOBOROSKI

J. D. Clements, DeWitt, Branch and Sowell Surveys, 12 mi e Seguin. **Means of Discovery:** Geological information, trend drilling along fault. **Discovery Data:** W. J. Walton et al, Anton Zoboroski 1, July, 1931, 15 bbls 34.5 gravity oil; total depth 2205 ft, producing horizon 2100-05 ft, elevation 436 ft, Austin chalk 2183 ft. W. J. Walton et al's Anton Zoboroski 4, March 26, 1936, 4,000,000 cu ft, 400 lbs pressure; total depth 940 ft, producing horizon 846-940 ft, elev 435 ft. **Geological Data:** Fractured chalk area along ne-sw fault, production on upthrow side of fault. **Producing Horizon:** Navarro sand, gas; Austin chalk, oil. **Producing Area:** 95 acres. **Extent of Development:** (to Jan. 1, 1936) 3 wells, 1 oil 2 failures. (During 6 months 1936) 6 wells, 5 oil, 1 gas. **Deepest Hole:** Adams & Lyles' E. Zoboroski 1, abd 2722 ft, Jan. 5, 1930, in Edwards topped at 2665 ft, taken over April 26, 1936, by Crouch et al, plugged back to 2210 ft and completed June 22, 1936, as 35-bbl well. **Daily Production, Aug. 1, 1936:** 332 bbls. **Rigs Runnning, Aug. 1, 1936:** 2. **Market Outlet:** Louis Crouch et al have pipe line to Darst Creek connection with Magnolia Pipe Line Co. **Reserve Data:** 237,500 bbls ultimate from proven area; 3914 bbls recovered to Jan. 1, 1936; 5889 bbls recovered first 6 months 1936. **Principal Leaseholders:** W. J. Walton and Louis Crouch.

HIDALGO COUNTY

BROCK and SHOWERS*

Porcions 79 and 80, 9 mi nw Mission. **Means of Discovery:** Geological survey followed by geophysical work. **Extent of Development:** Kanalles et al's Brock & Showers 1, Section 16, Porcion 79, drilled to 4590 ft and showed gas. S. J. Sloan et al's Brock & Showers 1, abd Jan. 6, 1936, 6003 ft, showed sands above 4700 ft, set casing 4715 ft, perforated 4660-75 ft, flowed gas with salt water and scum of oil, also salt water and oil through perforations 4223-33 ft and 4353-64 ft. E. A. Showers et al abd test April 16, 1935, at 5818 ft.

FERNANDEZ*

Porcions 45 and 46, 3½ mi n Havana. **Means of Discovery:** Geological information. **Extent of Development:** Dale L. Smith Oil Co. drilled 3 wells on A. H. Fernandez tract, No. 4 abd 2330 ft. No. 5 drilled to 4026 ft and made a gasser and No. 6 went to 3760 ft and abd. D. M. C. Oil Co. (Downey and Morton) Oscar Daskam abd Sept. 28, 1935, at 4115 ft. Encountered sand 4090-4100 ft showing gas, and 4102-4114 ft oil and salt water.

MERCEDES

Sections 58, 59, 60, 85 and 86 of the north Capisallo District, Llano Grande grant, 6 mi n Mercedes. **Means of Discovery:** Geophysical information. **Discovery Data:** Union Sulphur Co.'s American Rio Grande Land & Irrigation Co. 3, April 10, 1935, 600 bbls 49.2 gravity oil, ¼-in choke; 2200 lbs tubing, 2450 lbs casing pressure; total depth 7493 ft, producing horizon 7477-93 ft, elev 60 ft. Recompleted 185 bbls, 2⅛-in choke, 770 lbs tubing, 850 lbs casing pressure. **Geological Data:** Domal type structure cut by faulting. **Producing Horizon:** Frio. **Producing Area:** 1000 acres. **Extent of Development:** (to Jan. 1, 1936) 6 wells, 4 oil, 2 failures. (During 6 months 1936) 2 wells, 1 oil, 1 failure. **Deepest Hole:** Union Sulphur Co.'s American 2, abd 8044 ft, July 18, 1935. **Daily Production, Aug. 1, 1936:** 105 bbls. **Rigs Running, Aug. 1, 1936:** 3. **Market Outlet:** Trucks. **Reserve Data:** 1,500,000 bbls ultimate from proven area; 28,692 bbls recovered to Jan. 1, 1936; 28,217 bbls recovered first 6 months 1936. **Principal Leaseholder:** Union Sulphur Co. controls block.

MESTENAS‡

Mestenas grant, 8 mi ne Edinburg. **Means of Discovery:** Geophysical survey. **Discovery Data:** Gulf States Oil Co.'s J. C. Engelman 1, Aug. 1, 1935, 30 bbls 60 gravity oil, ¼-in and ⅝-in chokes, 1840 lbs casing pressure; total depth 7508 ft, producing horizon 6658-6748 ft, plugged back 6770 ft, set perforated pipe, made 18,000,000 cu ft gas with distillate. **Geological Data:** Domal type structure. **Producing Horizon:** Frio. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well. (During 6 months 1936) 2 failures. **Deepest Hole:** Discovery well. **Daily Production, Aug. 1, 1936:** Shut in. **Rigs Running, Aug. 1, 1936:** 1. **Reserve Data:** 980 bbls recovered to Jan. 1, 1936; 1000 bbls recovered first 6 months 1936. **Principal Leaseholders:** Gulf States Development Co., Sun Oil Co., Union Sulphur Co., McCollum Exploration Co.

SAN CARLOS*

La Mestinas grant, 2½ mi n San Carlos. **Means of Discovery:** Geophysical work. **Extent of Development:** Quintana Petroleum Corp.'s Engleman 1, lot 10, blk 49, abd June 29, 1936, as a junk hole. Drilled to 8893 ft and drill stem stuck. Elev 79 ft,

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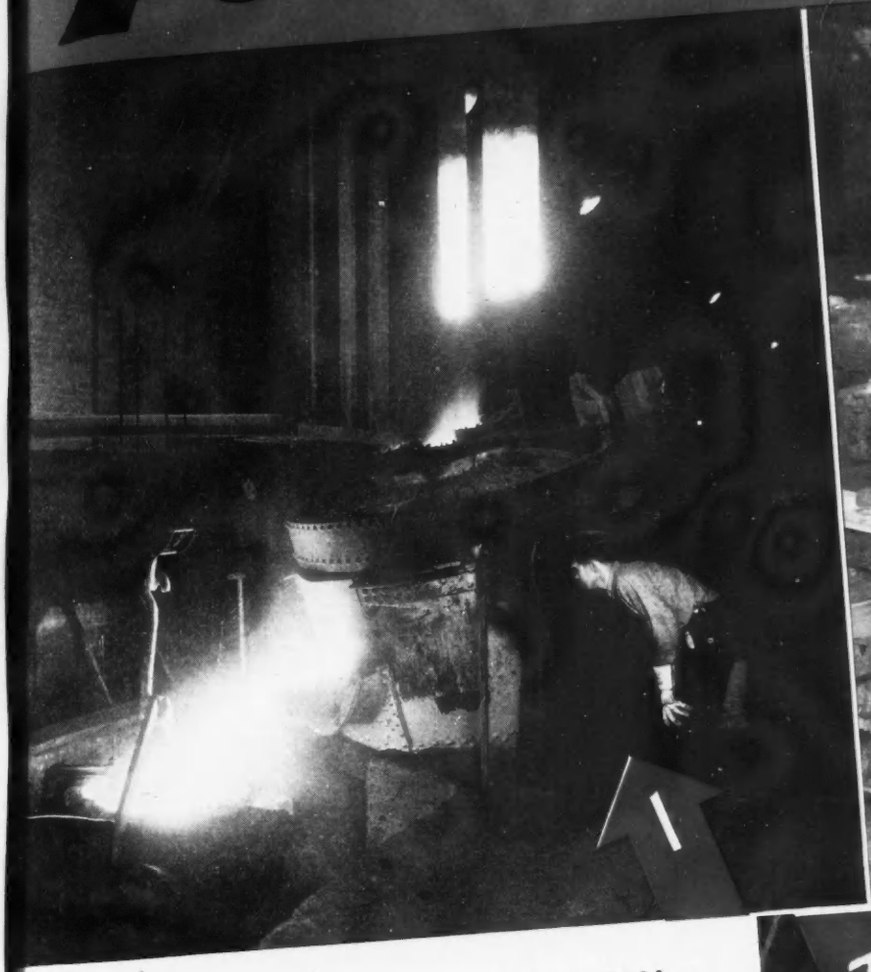

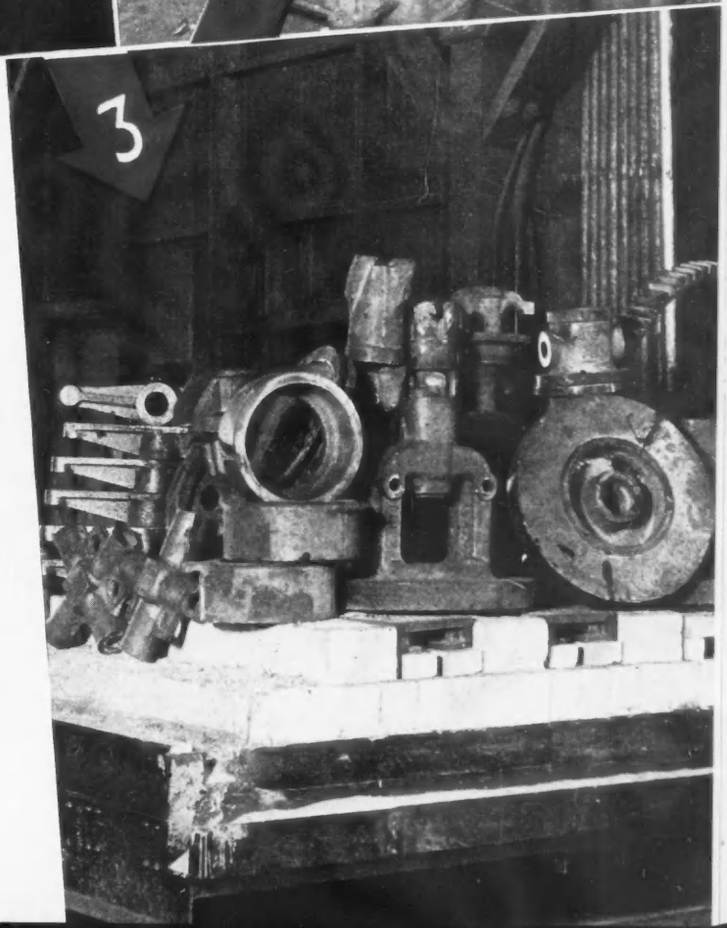

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GOOD CASTINGS — TESCO (CARBON AND ALLOY STEEL) — HOUSTON, TEXAS

top Catahoula 4021 ft, Discorbis 4783 ft, Frio 5200 ft, Vicksburg 8813 ft. McCollum Exploration Co. has commenced R. E. Harding 1, 850 ft west of Quintana test. **Principal Leaseholders:** McCollum Exploration Co., Quintana Petroleum Corp.

SAMFORDYCE

Hidalgo and Starr Counties, Porciones 38, 39, 40, 41, 99 and 100, ne Samfordyce. **Means of Discovery:** Geological information, geophysical work and shewing of dry holes in the immediate vicinity. **Discovery Data:** Otto Wood's Lawrence 1, Sept. 28, 1934, 500 bbls 20.7 gravity oil, ½-in choke; 400 lbs tubing, 800 lbs casing pressure; producing horizon 2737-53 ft, 6⅝-in casing 2730 ft. Casing commenced leaking when well attempted to blow out and flow gas allowed through opened tubing and casing. The output increasing to about 25,000 bbls per day. Well was later killed and 5 3/16-in casing set inside of original string. Barlow & Wheeler's Martha F. de Chapa 1, April 11, 1936, gas spraying 48 bbls oil, 1/16-in choke; 1050 lbs tubing, 1220 lbs casing pressure; total depth 2966 ft, elev 207 ft. G. W. Wheeler's Farias 2, June 23, 1936, 165 bbls of 22 gravity oil, ¼-in choke, 3200 ft; sandy shale 2828½-31 ft, oil sand 2831-53 ft. **Geological Data:** Anticlinal structure with sand lens flanking a nw-se trend on sw. **Producing Area:** 2000 acres, 920 acres oil. **Extent of Development:** (to Jan. 1, 1936) 139 wells, 112 oil, 4 gas, 23 failures. (During 6 months 1936) 49 wells, 41 oil, 3 gas, 5 failures. **Deepest Hole:** Heep Oil Corp.'s Jackson 1, abd 4136 ft in Vicksburg. **Daily Production, Aug. 1, 1936:** 5075 bbls. **Rigs Running, Aug. 1, 1936:** 7. **Market Outlets:** Valley Pipe Line Co. line to Port Isabel; rail. **Reserve Data:** 11,960,000 bbls ultimate from proven area; 1,381,512 bbls recovered to Jan. 1, 1935; 902,857 bbls recovered first 6 months 1936. **Principal Leaseholders:** Heep Oil Corp., Harrison-Davis-Bishops, King-Wood Oil Co., Lucky-Blocker, Showers-Moncrief, J. M. Newman et al, Navarro Oil Co., H. Reed, Rogers Oil & Gas Co., Weekly Oil Corp., Windsor Oil Co., Phillips Petroleum Co., Skelly Oil Co., G. W. Wheeler et al, Sun Oil Co., Barnsdall Oil Co., Porter & Pickens, Dean Brothers, James Anderson, Ralph Fair and others. **Remarks:** Several shallow gas sands and one gas sand at 4000 ft indicates probable future producing levels.

JACKSON COUNTY

FRANCITAS*

Centering around Francitas, in J. Power and H. Eldridge Surveys. **Means of Discovery:** Geophysical information. **Extent of Development:** Seismograph work done by Shell Petroleum Corp. and Pure Oil Co., first work done in 1929. Indications are that there is a subsurface fault, with terracing backed up against it. One 2640-ft dry hole was drilled near center of Power Survey.

LOLITA*

Centering around nw corner G. Ewing Survey. **Means of Discovery:** Torsion balance. **Extent of Development:** Geophysical work originally done by Alexander and Smith in 1929 and acreage turned to The Texas Co. The Texas Co.'s Mitchell 1 abd 6261 ft, Aug., 1930, with no encouragement. Texas Production Co.'s Mitchell 1, S. F. Austin Survey, abd Aug., 1933, 6041 ft, no showings. It is possible that this geophysical structure is a reaction off the Vanderbilt field.

MAURITZ

Section 33, Moriss & Cummings Survey, 4 mi s Louise field. **Means of Discovery:** Torsion balance, reflection seismograph and subsurface geology based on deep dry hole. **Discovery Data:** Shell Petroleum Corp.'s C. F. Combs 1, June 19, 1935, 633 bbls 27.6 gravity oil, ¼-in choke, 859 lbs tubing, 900 lbs casing pressure; total depth 5650 ft, sand 5634-50 ft, 7-in casing set 5630 ft, elev 90 ft. **Geological Data:** Small fault and sand lens. **Producing Horizon:** Frio. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 1 oil, 4 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Shell's McCrory 1, abd 7408 ft, in Vicksburg, June, 1935. **Daily Production, Aug. 1, 1936:** 125 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** The Texas Pipe Line Co. **Reserve Data:** 220,000 bbls ultimate from proven area; 12,550 bbls recovered to Jan. 1, 1936; 14,200 bbls recovered first 6 months 1936. **Principal Leaseholders:** Shell, T&P Coal & Oil Co., Venza Oil Corp., Smith & McDonald, Pure Oil Co.

VANDERBILT

Musquiz Survey, ½ mi se Vanderbilt. **Means of Discovery:** Geological information. Among other indications was a 1000-ft artesian well at Vanderbilt which showed gas, and several oil shows in wells by Vanderbilt Petroleum Co. in north central portion of Musquiz Survey. **Discovery Data:** Encino Oil & Gas Co.'s F. E. Toney 1, May, 1934, 528 bbls 33 gravity oil, ¼-in choke, 800 lbs tubing, 900 lbs casing pressure; total depth 5528 ft, producing horizon 5575-82 ft. **Geological Data:** Sand lenses against fault. **Producing Horizon:** Frio. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 1 oil, 4 failures. (During 6 months 1936) none. **Deepest Hole:** Phillips Petroleum Co.'s Drummond 1, abd 7042 ft, in Frio, Nov., 1934. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Loading racks at Vanderbilt. **Reserve Data:** 90,000 bbls ultimate from proven area; 71,075 bbls recovered to Jan. 1, 1936; approximately 8000 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Magnolia Petroleum Co., Phillips Petroleum Co., The Texas Co. **Remarks:** This is a one-well field, all offsets failing to produce.

VINCEK*

Northwestern portion of V. Garcia Survey. **Means of Discovery:** Geophysical survey. Couple of miles north of the forks of the Arenosa and Garcetas creeks several shallow wildcats on account of sulphur water showings in shallow farm wells. South, along the creek between this structure and the Vanderbilt field, several shallow wells showed evidence of gas. **Extent of Development:** Several shallow gas wells. Petroleum Finance Corp. and Continental Oil Co. drilled F. Vincek to 6636 ft in 1933 without developing production.

*Prospect. †Salt dome, no production. ‡Gas field.

JIM HOGG COUNTY

ALWORTH

Section 39. Extreme nw part of county. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Alworth Drilling Co.'s M. Garza 2, Nov. 23, 1926, 100 bbls of 21 gravity oil and 10,000,000 cu ft gas; total depth 1025 ft, sand 1020-25 ft; 6⅝-in casing 1018 ft; elev 488 ft. **Geological Data:** On monoclinal sand lensing structure. **Producing Horizon:** Upper Jackson series. **Producing Area:** 650 acres, 80 acres oil. **Extent of Development:** (to Jan. 1, 1936) 27 wells, 8 oil, 4 gas, 15 failures, (During 6 months 1936) none. **Deepest Hole:** Simms Oil Co.'s J. B. Leyendecker 1, abd 2199 ft. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** None. **Reserve Data:** 26,977 bbls ultimate from proven area; 26,977 bbls recovered to Jan. 1, 1936; no oil recovered first 6 months 1936. **Principal Leaseholders:** Alworth et al, Brooklyn Oil Co., Simms Oil Co., H. Maddox.

COLORADO

Section 623, 1 mi s Guerra. **Means of Discovery:** Geological information. **Discovery Data:** J. H. Meek et al's F. G. Martinez 1-A, Aug. 6, 1936, 25 bbls 47.4 gravity oil, 65 lbs tubing, 185 lbs casing pressure; total depth 3017 ft, producing horizon 3009-17 ft. **Geological Data:** Likely sand lens on Monocline. **Producing Horizon:** Cockfield. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 4 failures; (During 6 months 1936) none. **Deepest Hole:** Tarver & Nance's F. G. Martinez 1, abd 3047 ft, 1935. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** 1. **Principal Leaseholders:** Humble Oil & Refining Co., Sun Oil Co., J. H. Meek, V. F. Neuhaus. **Remarks:** Discovery well 25 ft from abn test.

HENNE-WINCH-FARRIS

Las Animas grant, Surveys 255, 256, 276, El Peyote grant, south of Webb County line and near Zapata County line. **Means of Discovery:** Trend play, geological information. **Discovery Data:** Big Bend Oil Co.'s A. Martinez 1, June 23, 1924, 60,000,000 cu ft gas, spraying 21 gravity oil; total depth 1960 ft, sand 1944-60 ft; elev 639 ft. **Geological Data:** Sand lensing on fold, shore line proposition. **Producing Horizon:** Hockleyensis zone of the Jackson series. **Producing Area:** 1160 acres, 720 acres oil. **Extent of Development:** (to Jan. 1, 1936) 241 wells, 147 oil, 34 gas, 60 failures. (During 6 months 1936) None. **Deepest Hole:** Kitselman & St. Albans' R. Holbein 57, Block 40, Survey 17, abd July 17, 1926, 3546 ft; sands 2398-2402 ft and 2998-3003 ft, tested salt water and gas; elev 706.8 ft. **Daily Production, Aug. 1, 1936:** 5 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 3,222,000 bbls ultimate from proven area; 3,202,298 bbls recovered to Jan. 1, 1936; 984 bbls recovered first 6 months 1936. **Principal Leaseholders:** H. L. Wright, Magnolia Petroleum Co., Argyle Investment Co., and others.

PEYOTE‡

Survey 573, Share 1, ne portion of county. **Means of Discovery:** Geological data. **Discovery Data:** Clark & Cowden's E. Vela 1, Oct. 17, 1932, 8,000,000 cu ft gas; total depth 3209 ft, plugged back to 2140 ft, redrilled to 2263 ft; when first drilled, well showed sand section from 2224-94 ft. **Geological Data:** Is sand lensing similar to remainder of Mirando district. **Producing Horizon:** "Government Wells sand," Jackson age. **Producing Area:** 20 acres, none oil. **Extent of Development:** (to Jan. 1, 1936) 3 wells, 1 gas, 2 failures. (During 6 months 1936) none. **Deepest Hole:** Discovery well. **Market Outlet:** Shut in. **Principal Leaseholder:** Clark & Cowden.

RANDADO

Including Sections 291, 614, 82, 231, 232, 287, 81, 85, 83, 233, 287, 19, 230, 267 and 415. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Conway et al's G. Placios 2, April 21, 1926, 1000 bbls 20.5 gravity oil; total depth 1266 ft; sand 1249-55 ft, elev 478 ft. **Geological Data:** Sand lensing structure with several small local highs. **Producing Horizon:** Upper Jackson series. **Producing Area:** 1000 acres, 765 acres oil. **Extent of Development:** (to Jan. 1, 1936) 237 wells, 176 oil, 15 gas, 46 failures. (During 6 months 1936) None. **Deepest Hole:** Mount Selman test abd 5222 ft. **Daily Production, Aug. 1, 1936:** 312 bbls. **Rigs Running, Aug. 1, 1936;** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 4,743,000 bbls ultimate from proven area; 4,244,915 bbls recovered to Jan. 1, 1936; 54,342 bbls recovered first 6 months 1936. **Principal Leaseholders:** Bob & Rickey, G. E. Glasco, Grayburg Oil Co., Simms Oil Co., Superior Oil & Gas, Randado Oil Corp.

JIM WELLS COUNTY

ARMAGOSA‡

Sections 88, 89, B. Baldwin and Stanley Welch Surveys, 10 mi n Alice. **Means of Discovery:** Geological information. Surface indications and subsurface correlations. **Discovery Data:** Carsil Oil & Gas Co.'s McG'll 1, April 9, 1931, 60,000,000 cu ft gas per day; total depth 2689 ft, elev 150 ft; 5 3/16-in casing set 2682 ft; cap 2681-82 ft; well blew in wild, finally controlled, plugged back and abd. Gulf Production Co.'s Shaffer 5, Feb. 20, 1932, 30,000,000 cu ft gas, shut in pressure 900 lbs, working pressure 690 lbs; ⅜-in choke; total depth 3044 ft, plug back 2427 ft, set 155 ft perforated liner on packer; 2272 ft of 2½-in tubing; producing horizon 2348-57 ft. **Geological Data:** Domal type structure. **Pro-**

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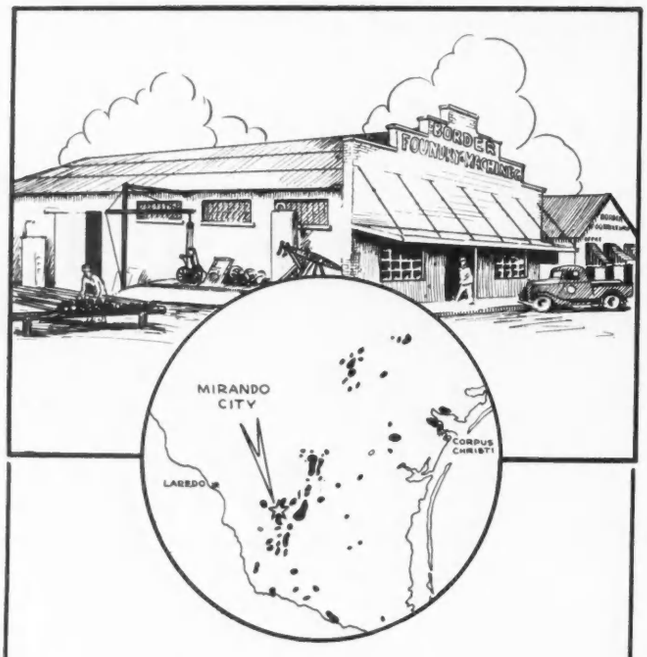

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ducing Horizon: Discorbis, Heterostegina zone, Oligocene. **Producing Area:** 400 acres. **Extent of Development:** (to Jan. 1, 1936) 6 wells, 3 gas, 3 failures. (During 6 months 1936) 1 gas well. **Deepest Hole:** Smith & Storey's M. E. Dilworth 1, Jan. 4, 1935; total depth 6115 ft in Yegua; perforated 2328-32 ft, completed as gasser; elev 335 ft. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running: Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Reserve Data:** Gas field. **Principal Leaseholders:** Carsil Oil & Gas Co., Gulf Oil Corp., Storey & Smith.

BEN BOLT*

La Trinidad Survey, near town of Ben Bolt. **Means of Discovery:** Geophysical work. **Extent of Development:** Stanolind Oil & Gas Co.'s Hoffman 1, abd 6464 ft, Dec. 10, 1932. **Principal Leaseholder:** Stanolind Oil & Gas Co.

BENTONVILLE-KING

In Jim Wells and Nueces Counties, Secs 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, Richard King Farm lots subdivision, 1 mi n Bentonville. **Means of Discovery:** Geophysical information. Topographical high, which is also a inlier of Lissie gravel in the Beaumont clay formation, indicating a surface structure. Oil development followed further geophysical work plus subsurface geological work and drilling of several dry holes. **Discovery Data:** Stanolind Oil & Gas Co. and John F. Camp's Richard King 1, April 16, 1932, 40,000,000 cu ft dry gas, tubing pressure 1100 lbs, casing 1300 lbs; total depth 3899 ft; 7-in casing 3888 ft, sand 3893-99 ft; elev 142 ft. Richard King 2, July 8, 1932, 40,000,000 cu ft gas, tubing pressure 1200 lbs, casing 1400 lbs; total depth 4030 ft; sand 4010-30 ft, elev 127.9 ft. Texon Royalty Co. and Lucey Petroleum Corp.'s Coopwood & Rolston 1, April 27, 1936, 193 bbls 39.6 gravity oil, 11/64-in choke; tubing pressure 615, casing 950 lbs; total depth 6015 ft; 7-in 5526 ft, perforated 5380-96 ft. **Geological Data:** No definite information available. There are a number of sand lenses on an anticlinal structure, probably some faulting. **Producing Horizon:** Gas sands are in Discorbis-Heterostegina zone, oil in Frio. **Producing Area:** 2650 acres, 30 acres oil (around wells). **Extent of Development:** (to Jan. 1, 1936) 5 wells, 3 gas, 2 failures. (During 6 months, 1936) 5 wells, 2 oil, 2 gas, 1 failure. **Deepest Hole:** Texon Royalty Co. and Lucy Petroleum Co.'s Leona Dodd 1, total depth 6500 ft, plug back and set 7-in casing 4725 ft, perforated 4000-ft sand and completed as gasser July, 1936. **Daily Production, Aug. 1, 1936:** 250 bbls. **Rigs Running, Aug. 1, 1936:** 6. **Market Outlet:** Trucks. **Reserve Data:** 245,000 bbls ultimate from proven area; no oil recovered to Jan. 1, 1936; 11,000 bbls recovered first 6 months 1936. **Principal Leaseholders:** La Jita Corp., Lucey Petroleum Corp., United Gas Co., Stanolind Oil & Gas Co., Texon Royalty Corp., Mid-Continent Petroleum Corp., Magnolia Petroleum Co., G. McIntyre et al, Camp Drilling Co.

PREMONT

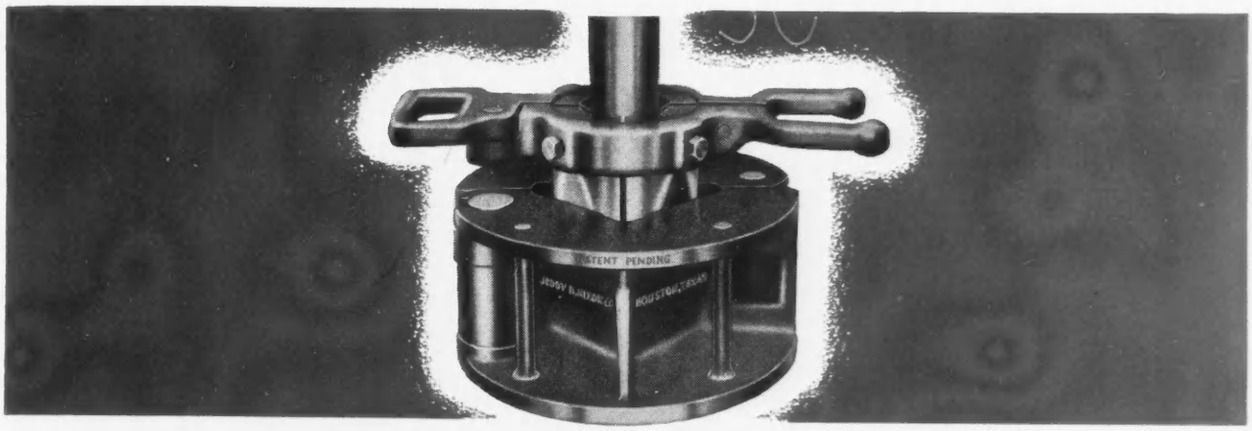
Centering around Section 71, near town of Premont. **Means of Discovery:** Torsion balance and seismograph. Survey indicated possible deep-seated salt dome. **Discovery Data:** Magnolia Petroleum Co.'s A. A. Seeligson 2, Apr. 5, 1933, flowing 288 barrels fluid, 30% sw and 15,000,000 cu ft gas, ⅛-in choke; 800 lbs tubing, 900 lbs casing pressure; total depth 3255 ft, producing horizon 3247-55 ft. Trinity Drillers, Inc.'s A. A. Seeligson 1, 1934, 50 barrels oil and lots gas, 700 lbs tubing, 1000 lbs casing pressure; total depth 4032 ft, producing horizon 2366-84 ft, plugged back and set casing 2354 ft. **Geological Data:** Domal type structure with series of sand lenses, producing area likely rather spotted. **Producing Horizon:** Near top of Marine Oligocene. **Producing Area:** 400 acres, 30 acres oil. **Extent of Development:** (to Jan. 1, 1936) 12 wells, 4 oil, 1 gas, 7 failures. (During 6 months 1936) none. **Deepest Hole:** Magnolia Petroleum Co.'s A. A. Seeligson 6, abd 7135 ft in heaving shale, Aug. 6, 1934. **Daily Production Aug. 1, 1936:** None. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** 7803 barrels ultimate from proven area; 7803 barrels recovered to Jan. 1, 1936. **Principal Leaseholders:** Magnolia Petroleum Co., Sinclair Prairie Oil Co., Trinity Drillers, Inc., T. B. Slick, Inc., Rodney Delange.

SANDIA‡

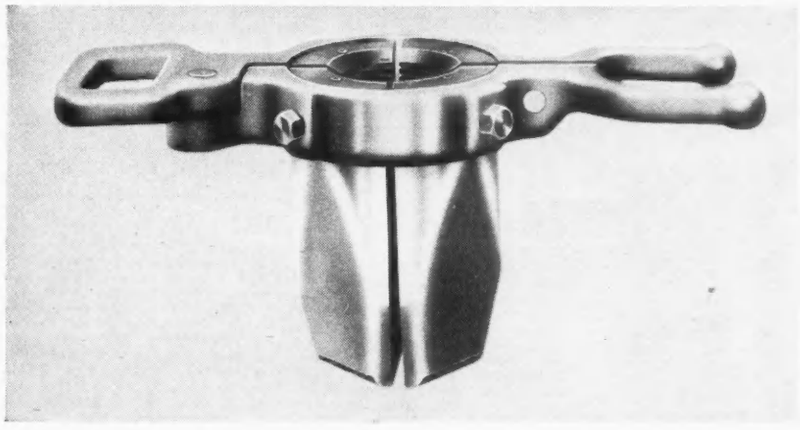
W. D. Wade Ranch, Casa Blanco Grant, 2 mi nw Sandia. **Means of Discovery:** Surface and subsurface geology. **Discovery Data:** Larcro Gas & Petroleum Co.'s Wade 1, Nov. 20, 1929, 50,000,000 cu ft gas, 3/16-in choke, 1050 lbs tubing, 1300 lbs casing pressure; total depth 2917 ft, producing horizon 2910-17 ft, elev 149 ft. O. W. Killam's Wade 4, Feb. 12, 1935, 60 bbls per hour on short gauge, but s w broke in, ¼-in choke, 450 lbs tubing, 1125 lbs casing pressure, 42.4 gravity; total depth 4029 ft, producing horizon 4022½-28 ft, 7-in casing 4025 ft, later deepened to 4850 and abd. **Geological Data:** Elongated low anticline cut to nw by fault, with 70-ft displacement. **Producing Horizon:** Marine Oligocene topped at 2620 ft, oil in Vicksburg. **Producing Area:** 120 acres. **Extent of Development:** (to Jan. 1, 1936) 13 wells, 3 gas, 10 failures. **Deepest Hole:** O. W. Killam's Wade 7, abd 5174 ft, July 14, 1935. **Daily Production Aug. 1, 1936:** Gas field. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholders:** O. W. Killam, Larcro Gas & Petroleum Co., J. E. Walsh and others.

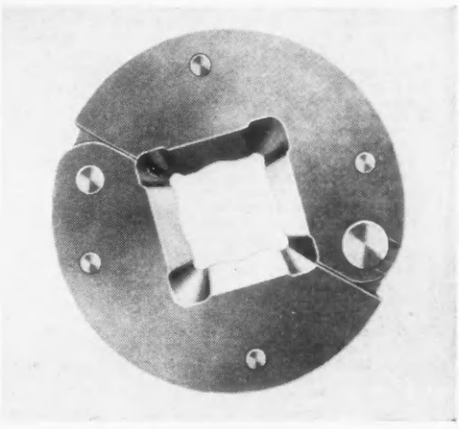
SAN DIEGO‡

Share 3, Diego Grant, 3 mi e San Diego. **Means of Discovery:** Geological information. **Discovery Data:** Roger Putnam et al, E. A. Hawkins 1, Dec. 2, 1935, 10,000,000 cu ft gas, ⅛-in choke, 1200 lbs tubing, 1260 lbs casing pressure; total depth 2976 ft, producing horizon 2963-76 ft, elev 290 ft (closed in pressure build up 1260 lbs). **Geological Data:** Anticline. **Producing Horizon:** Frio. **Producing Area:** 120 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well. (During 6 months 1936) 1 gas well. **Deepest Hole:** Houston Oil Co. et al's E. A. Hawkins 1, total



NIXON "TRUE-TAPER" SLIP and SPIDER





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For years, manufacturers of tubing slips and rotary slips have sought to obtain TRUE-TAPER in slip construction. They have known that ROUND TAPERED BACK slip segments can not possibly match tapers with the spider in which they work—except at one point, where slips begin failing to hold. They have known that unmatched tapers cause sticking; cut and swaged pipe; premature wear on slips and spider; non-positive grip; hard release; and numerous other disadvantages.

Discarding all precedents and previous theories, therefore, the designer of the Nixon Tubing Slip & Spider took the age-old principle of the flat wedge and adapted it in an entirely new way to tubing slip construction. The result is TRUE-TAPER relationship between the slip segments and the spider, and segment faces which are always parallel with the pipe. Whether the slips ride "high" or "low" in the spider, depending upon the amount of wear on the teeth, the backs of the segments are always in perfect contact with the corresponding tapered surfaces of the spider.

This principle of construction brings to users an entirely different kind of performance than that to which they have been accustomed. Operation is exceptionally free and easy. Grip is instant and positive, and release is completely free of any tendency to stick or bind, regardless of the length of tubing string. The sledge hammer, a necessary auxiliary to most conventional types of tubing slips, is eliminated. Service life is extended four to six times the normal life of conventional slips, resulting in great economy. Re-sharpening, which may be done several times, is accomplished by re-cutting the teeth exactly as they were originally formed—not by swaging them up.

An understanding of all the facts concerning the Nixon Tubing Slip & Spider will, we believe, convince users of this type of equipment that they should try them. In service, their performance will prove every claim made for them.

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BRANCHES

Barbers Hill, Kilgore, Greta, Gladewater, Bay City, Victoria, Pierce, Talco and Corpus Christi, Texas; Lake Charles, New Iberia and Rodessa, La.

depth 6480 ft, plugged back and set 7-in csg 3025 ft, perforated 2952-57 ft and completed as gasser. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** No connection. **Reserve Data:** Gas field. **Principal Leaseholders:** Houston Oil Co. controls majority of block.

KARNES COUNTY

BURNELL‡

James Johnson, A. Germany, A. Storey, J. H. Clark Surveys, 2 mi e Burnell. **Means of Discovery:** Geological information, trend play, geophysical work. **Discovery Data:** Norton & Marr et al's M. E. Choate 1, Nov. 19, 1934, 30,000,000 cu ft gas, 1425 lbs shut-in pressure; total depth 3550 ft, sand 3299-3327 ft, shale 3327-30 ft, sand 3330-42 ft, elev 382 ft. **Geological Data:** Folding and faulting. **Producing Horizon:** Cockfield (Pettus). **Producing Area:** 1250 acres. **Extent of Development:** (to Jan. 1, 1936) 13 wells, 7 gas, 6 failures. (During 6 months 1936) none. **Deepest Hole:** Luling Oil & Gas Co.' W. W. Boyce 1, abd 3740 ft, May 27, 1935. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholders:** Magnolia Petroleum Co., Marr & Norton, Herman Brown, United Production Corp., American Liberty Oil Co.

GREEN*

Southwestern portion of Carlos Martinez Grant, w of highway and railroad and midway between Green and Burnell. **Means of Discovery:** Geological information and trend drilling on apparent surface faulting. **Extent of Development:** Four wells have been drilled. Fort Bend Oil Co.'s J. F. Newberry 1, Oct. 14, 1930, encountered sand at 2964-75 ft which developed 700 lbs dry gas pressure on 4-minute drill-stem test through ⅜-in choke, 6⅝-in 2958 ft. Made a little gas, but when deepened slightly developed sw and abd. Three other tests in the immediate vicinity failed to develop production. Luling Oil & Gas Co. now drilling on this prospect.

NORTH PETTUS

In corner of Karnes-Goliad-Bee Counties, W. J. Porter, George Habbermacher, Brooks & Burleson, Nos. 23 and 25, Javiano Gomez, Porter State, E. Talley, G. B. Meyers, 7 mi nw Pettus. **Means of Discovery:** William F. Morgan et al's McKinney 1, Apr. 23, 1930, 20,000,000 cu ft gas, spraying distillate; total depth 3891 ft, sand 3881-91 ft; casing 1500 lbs, tubing pressure 1000 lbs, 6⅝-in csg 3880 ft. United Production Co.'s George Ray 14, later completed producing 440 bbls 42 gravity oil in same sand at 3670-86 ft. United Production Co.'s G. A. Ray 47, Nov. 16, 1934, 10,000,000 cu ft gas spraying small quantity oil, tubing 125 lbs, casing 150 lbs; total depth 3958 ft, sand 3932-45 ft and 3945-58 ft, 7-in csg 3950 ft, elev 386 ft. **Geological Data:** Sand lenses backed up against several faults, well broken by cross faults. **Producing Horizon:** Cockfield in Jackson series, locally called Pettus sand. **Producing Area:** 1050 acres, 720 acres oil. **Extent of Development:** (to Jan. 1, 1936) 66 wells, 47 oil, 10 gas, 9 failures. (During 6 months 1936) 22 wells, 19 oil, 2 gas, 1 failure. **Deepest Hole:** Moody-Seagraves Oil Corp.'s C. W. Boyce 1, abd 5259 ft. **Daily Production Aug. 1, 1936:** 900 bbls. **Rigs Running Aug. 1, 1936:** Four. **Market Outlet:** Atlantic Pipe Line Co., Houston Pipe Line Co., Pettus Refining Co. **Reserve Data:** 9,660,000 bbls ultimate from proven area; 1,284,485 bbls recovered to Jan. 1, 1936; 266,008 bbls recovered first 6 months 1936. **Principal Leaseholders:** Begol Corp., United Production Corp., Houston Oil Co., Magnolia Petroleum Co., Sun Oil Co., Jane Oil Co., Diamond Half Oil Co., Henshaw Brothers.

KENEDY COUNTY

PINTA HILL*†

In ne portion of "Santa Quiteria" or Ramon Cabasos Gueria Survey, adjoining Brooks County line. **Means of Discovery:** Topographic high and a fresh water lake constitute the indication of a dome, although there has been no confirmation by drilling. **Extent of Development:** None.

KENDALL COUNTY

SISTERDALE*

John F. Torrey Survey No. 781, near Sisterdale. **Means of Discovery:** Surface geology: **Discovery Data:** 6 wells drilled, 5 failures, 1 oil well. Sterling et al's Willie Werner 1, Mar. 17, 1930, 20 bbls 31 gravity oil and some water; total depth 975 ft, broken sandy lime 954-75 ft, elev 1387 ft. **Producing Horizon:** Is likely Pennsylvanian, although some say that the production possibly is coming from the contact of the Pennsylvanian and Ordovician. About 2500 bbls of oil recovered and well abd.

KERR COUNTY

LOVE RANCH*

Centering around the J. Martinez Survey 1594, in the southwestern corner of county, 45 mi w of Kerrville. **Means of Discovery:** Geological information, based on surface indications. **Extent of Development:** Twelve wells have been drilled in area. Evans & Gant's Jeff Love 1, Dec. 23, 1930, 65 bbls 39.8 gravity oil and considerable water in 3 hours from sand 3374-91 ft, caught fire, burned for several days and finally killed. Salt water flow increased and could not be cut off. Well had sands at 2544-63, 3490-3505 ft as well as at the level in which completion was attempted, abd at 4060 ft. Love 2 found shows in Mississippian at 5540-5830 ft, striking a porous lime at 5826-30 ft in which it filled with 34 gravity black oil, but went to salt water when deepened to 5850 ft. Sand at 3055-60 ft in Pennsylvanian showed oil. Elevation 2380 ft, abn 5870 ft. Other tests have had shows. One test drilling.

*Prospect. †Salt dome, no production. ‡Gas field.

KLEBERG COUNTY

KINGSVILLE

Sections 37, 38, 39, 40 and 41, s Kingsville. **Means of Discovery:** Wells drilled for water as early as 1912 showed gas, well on Rosse farm in 1914 blew out, caught fire. **Discovery Data:** Kleberg Oil & Gas Co.'s Rosse 1, 1920, initial production 50,000,000 cu ft, 2143 ft. Above sands produced 22.5 gravity oil in later wells. Humble Oil & Refining Co.'s Flato 2, 1926, 1000 bbls 21 gravity oil, 2928 ft. Kelly Production Co.'s Jones 1, Feb., 1927, 8,000,000 cu ft gas, 1400 ft. Carter-Walsh's Flato 1, June 8, 1926, total depth 3034 ft, 3,000,000 cu ft gas at 1887 feet. Clymore Production Co.'s Flato 1, Mar. 15, 1935, 30,000,000 cu ft gas, 20 bbls oil, 2795-2801 ft. **Geological Data:** Domal type structure, may be deep seated salt dome. **Producing Horizon:** Miocene and Oligocene. **Producing Area:** 1800 acres, 200 acres oil. **Extent of Development:** (to Jan. 1, 1936) 58 wells, 18 oil, 14 gas, 26 failures. (During 6 months 1936) 3 failures. **Deepest Hole:** Humble Oil & Refining Co.'s Flato 4; abd 6814 ft, Oct., 1929. **Daily Production Aug. 1, 1936:** 56 bbls. **Rigs Running Aug. 1, 1936:** One. **Market Outlet:** Humble Oil & Refining Co. **Reserve Data:** 700,000 bbls ultimate from proven area; 638,693 bbls recovered to Jan. 1, 1936; 10,359 bbls recovered first 6 months 1936. **Principal Leaseholders:** Harry Clark, Humble Oil & Refining Co., J. S. Brown, McCord & Daybault, Fidelity Exploration Co., Clymore Production Co.

LIVE OAK COUNTY

FORT MERRILL

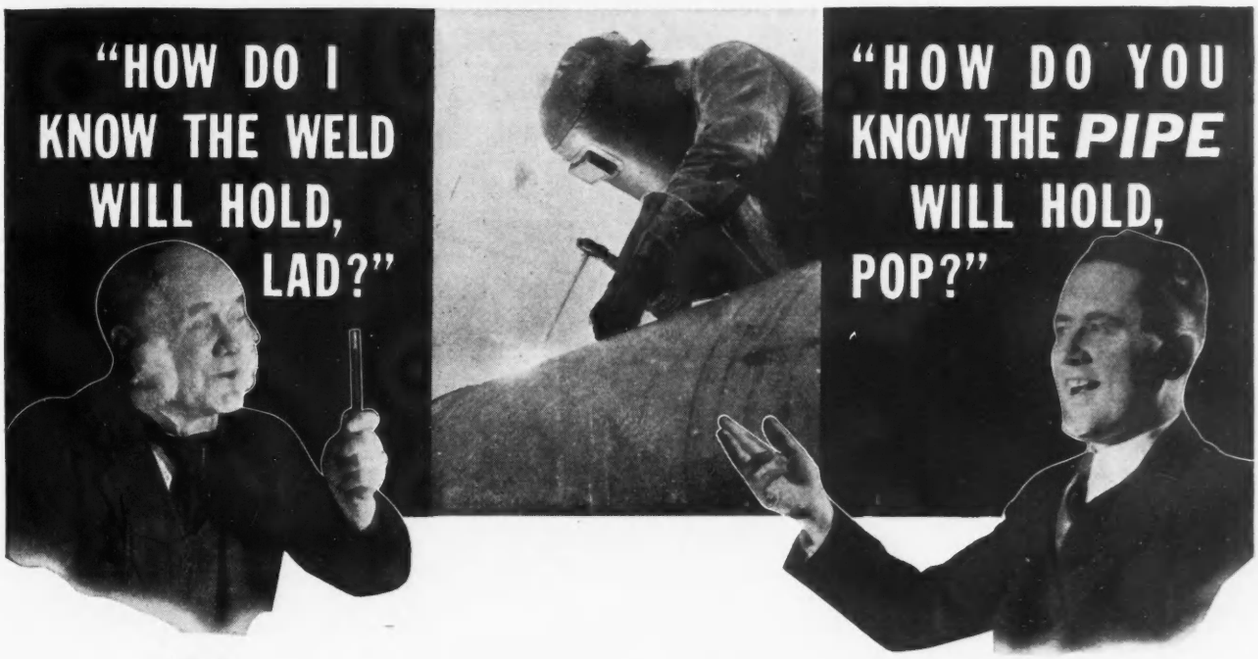
P. Salinas Survey, 7 mi se George West. **Means of Discovery:** Geological data, trend play. **Discovery Data:** Mills Bennett's Walton & Shipp 1, Aug. 19, 1935, 325 bbls 42 gravity oil, ⅛-in choke, 650 lbs tubing, 950 lbs casing pressure; total depth 5425 ft, producing horizon 4699-4700 ft, (plugged to 4750 ft and perforated with 50 shots at 4700-4706 ft). **Geological Data:** Production due to closure against fault. **Producing Horizon:** Upper Saline Bayou (Yegua). **Producing Area:** 30 acres. **Extent of Development:** (to Jan. 1, 1936) 1 oil well. (During 6 months 1936) 1 oil well. **Deepest Hole:** Discovery. **Daily Production Aug. 1, 1936:** 45 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Railroad. **Reserve Data:** 90,000 bbls ultimate from proven area; 10,030 bbls recovered to Jan. 1, 1936; 11,668 bbls recovered first 6 months 1936. **Principal Leaseholders:** Mills Bennett, Trinity Drillers, Slick-Slick Urschel Oil Corp.

MOUNT LUCAS

Includes M. B. Kiolin, G. W. Wright, E. Gonzales, F. Botello, W. J. Cannon, John McMullen, J. Sandman Surveys, at town of Lucas. **Means of Discovery:** Geological information. **Discovery Data:** Houston Oil Co.'s Cartwright 1, Jan., 1923, 20,000,000 cu ft gas. Ross Boothe 1-A, Feb. 1, 1931, 63 bbls 52 gravity oil; total depth 5277 ft, 6⅝-in csg 5260 ft, sand 5270-77 ft. Cartwright 23, July 23, 1931, 200 bbls 23.5 gravity oil; total depth 3565 ft, 9-in csg 3550 ft, sand 3554-65 ft. **Geological Data:** Sand lenses on large Domal type structure. Some faulting. **Producing Horizon:** Gueydan-Catahoula zone gas sands 2000-2400 ft; Frio 3500 ft; Pettus 5200 ft. **Producing Area:** 3650 acres, 320 acres oil. **Extent of Development:** (to Jan. 1, 1936) 63 wells, 12 oil, 37 gas, 14 failures. (During 6 months 1936) 2 failures. **Deepest Hole:** Houston Oil Co.'s Cartwright 32, total depth 6787 ft, plugged back 5316 ft, set casing at 5316 ft, perforated 5246-56 ft, completed 12,000,000 cu ft gas, June 30, 1935. **Daily Production Aug. 1, 1936:** 50 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Houston Oil Co. main gas line connection. **Reserve Data:** 1,160,000 bbls ultimate from proven area; 146,434 bbls recovered to Jan. 1, 1936; 54,388 bbls recovered first 6 months 1936. **Principal Leaseholders:** Houston Oil Co., Marine Oil Co. **Remarks:** Principally a gas field, deep wells high gas/oil ratio producers, but some fluid from gas. **Remarks:** Houston Oil Co.'s Cartwright 35, Aug. 24, 1936, 50 bbls 23.2 gravity oil, total depth 5532 ft, plugged back 2510 ft, producing horizon 2505-10 ft, 9-in 2276 ft, liner through sand, elev 85 ft; opens new oil producing horizon.

McNEILL

S. N. Dobie, G H & H Railway, M. M. Shipp and Jane Curry Surveys, 2 mi w Dinero. **Means of Discovery:** Geological information. **Discovery Data:** Lion Oil Refining Co.'s McNeill 1, Aug. 17, 1934, 360 bbls 44.5 gravity oil; total depth 4376 ft, 9⅝-in csg 4368 ft, sand 4370-76 ft, 200 lbs tubing, 350 lbs casing pressure, ¼-in choke. J. O. Whittington's Little 2, Aug. 21, 1935, 360 bbls 45 gravity oil, ¼-in choke, 450 lbs tubing, 600 lbs casing pressure; total depth 5028 ft, producing horizon 4977-5028 ft, elev 458 ft. **Geological Data:** Closure against faulting. **Producing Horizon:** Upper oil from Hockleyensis, lower oil from Cockfield (Pettus). **Producing Area:** 120 acres, 70 in oil. **Extent of Development:** (to Jan. 1, 1936) 13 wells, 7 oil, 1 gas, 5 failures. (During 6 months 1936), 1 failure. **Deepest Hole:** Lion Oil & Refining Co.'s Dick Dobie 1, abd 6212 ft, Nov. 7, 1935. **Daily Production Aug. 1, 1936:** 135 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Rail, trucks. **Reserve Data:** 472,500 bbls ultimate from proven area; 113,482 bbls recovered to Jan. 1, 1936; 28,785 bbls recovered first 6 months 1936. **Principal Leaseholders:** Trinity Drillers, Lion Oil & Refining Co., Darby



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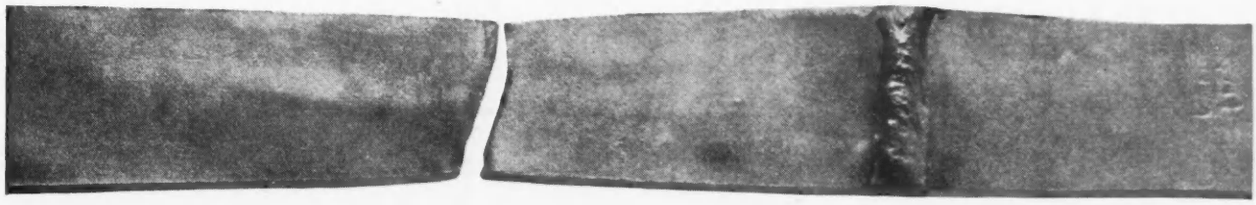
"So, whenever you are out in the field and see a bright blue arc digging away at pipe, I-beams, or what have you, look for the label on the carton nearby. If it's 'FLEETWELD,' just say to yourself, 'That weld will reach doomsday looking brighter and sturdier than the steel itself.' Send the coupon for some interesting figures." THE LINCOLN ELECTRIC COMPANY, Dept. L-304, Cleveland, Ohio. Largest Manufacturers of Arc Welding Equipment in the World.



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LOBO*

William Odocharty Survey, 1 mi nw Oakville. **Means of Discovery:** Surface indications. **Discovery Data:** Live Oak Basin Oil Co.'s Reagan 1, 1920, 2,000,000 cu ft gas, 840 ft. **Geological Data:** Sand lensing and faulting. **Producing Horizon:** Top Jackson. **Producing Area:** 80 acres. **Extent of Development: (to Jan. 1, 1936)** 10 wells, 2 gas, 8 failures. (During 6 months 1936) None. **Deepest Hole:** Lightfoot et al's W. H. Lewis 1, abd 2575 ft. **Principal Leaseholder:** Field abandoned. Henderson Coquat et al.

MARBACH‡

Block 15, Claunch Ranch, Elizabeth Jurdin Surveys, 3 mi sw Witsett. **Means of Discovery:** Geological information, trend play. **Discovery Data:** C. L. Witherspoon, Sr.'s Marbach 1-A, Apr. 25, 1934; total depth 527 ft, sand 513-27 ft, 4-in csg set 513 ft, 10,500,000 cu ft gas, rock pressure 173 lbs. **Geological Data:** Sand lensing structure, dipping se; ne-sw trend. **Producing Horizon:** Hockleyensis. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 7 wells, 1 gas, 6 failures. (During 6 months 1936) none. **Deepest Hole:** C. L. Witherspoon's Marbach 2, abd 1507 ft, July 1, 1934. **Daily Production Aug. 1, 1936:** Only producing gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Small line to Three Rivers. **Principal Leaseholders:** C. L. Witherspoon. Unit Oil Co., J. H. Durbin.

NORTH LUCAS

Jane Curry Survey, at Dinero Townsite. **Means of Discovery:** Trend play. **Discovery Data:** Smith & Story's Frederick 1, Apr. 6, 1935, 440 bbls 44.2 gravity oil, ¼-in choke, 700 lbs tubing, 1200 lbs casing pressure; total depth 5209 ft, producing horizon 5201-09 ft, elev 104 ft. **Geological Data:** Production due to sand conditions. **Producing Horizon:** (Conroe sand) Yegua. **Producing Area:** 350 acres, 120 acres oil. **Extent of Development:** (to Jan. 1, 1936) 7 wells, 2 oil, 1 gas, 4 failures. (During 6 months 1936) none. **Deepest Hole:** Houston Oil Co.'s Frederick 1, abd 5913 ft, Sept. 12, 1935. **Daily Production Aug. 1, 1936:** 57 bbls. **Rigs Running Aug. 1, 1936:** One. **Market Outlet:** Rail. **Reserve Data:** 600,000 bbls ultimate from proven area; 28,376 bbls recovered to Jan. 1, 1936; 21,109 bbls recovered first 6 months 1936. **Principal Leaseholders:** Smith & Story, Houston Oil Co.

OAKVILLE ‡

Louis Romero Survey, 1 mi n Oakville. **Means of Discovery:** Surface indications. **Discovery Data:** Simmons Oil & Gas Co.'s Reagan 1, 1928, 1,500,000 cu ft, total depth 300 ft, producing horizon 256-300 ft, 52 lbs rock pressure. Simmons Oil & Gas Co.'s McGriff 2, Sept. 7, 1936, 12,000,000 cu ft, 1300 lbs tubing pressure, ¼-inch choke, sand 2792-2802 ft and 2804-16 ft, set 5½-inch casing on bottom and perforated. **Geological Data:** Considerable major faulting. **Producing Horizon:** Upper gas from Catahoula, lower gas from Cockfield (Pettus). **Producing Area:** 320 acres. **Extent of Development:** (to Jan. 1, 1936) 22 wells, 11 gas 11 failures. (During 6 months 1936) None. **Deepest Hole:** Texas Company's Reagan 1, abd 4500 ft. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** One. **Market Outlets:** Line to Three Rivers. **Reserve Data:** Gas field. **Principal Leaseholders:** Simmons Oil & Gas Company. **Remarks:** Field has produced more than 1,000,000,000 cubic feet gas and pressure still at 52 pounds.

PICKETT‡

T. B. Sparks, J. J. Sparks Surveys, 4 mi sw Whitsett. **Means of Discovery:** Trend drilling. **Discovery Data:** Geo. B. Pickett's Nelson 2, 1926, 500,000 cu ft gas, 438 ft. **Geological Data:** Small subsurface high with local sand lenses. **Producing Horizon:** Gas in lower Cole sand. **Producing Area:** 140 acres. **Extent of Development:** (to Jan. 1, 1936) 15 wells, 6 gas, 9 failures. (During 6 months 1936) none. **Deepest Hole:** Loma Oil Co.'s Brewer 1; abd 1306 ft. **Daily Production Aug. 1, 1936:** Gas. **Rigs Running Aug. 1, 1936.** None. **Reserve Data:** Produces only gas. **Principal Leaseholders:** Loma Oil Co.

SIMMONS*

Centering Sections 41, 42, 43 and 44, Simmons subdivision, 2 mi sw Simmons City. **Means of Discovery:** Surface structure. **Extent of Development:** About 14 shallow wells have been drilled, developing 9 small gassers at about 600 ft in the Cole (Fayette) section of the Jackson. Lightfoot et al's Thomas 1 was deepest hole, abd 2475 ft. All gas wells have been abd.

THREE RIVERS ‡

B. Haughy, Thomas Henry, R. Everett Surveys, 1 mi nw Three Rivers. **Means of Discovery:** Trend drilling. **Discovery Data:** Glasco & Falin's Tips 1, 1926, 662 ft, blew out while drilling, made about 10,000,000 cu ft gas. Aaron Cohen's C. R. Tips 1, 1926, 5,000,000 cu ft, 826 ft. **Geological Data:** Sand lensing, some faulting. **Producing Horizon:** Discovery sand top Jackson, second sand Cole (Eagle Hill). **Producing Area:** 250 acres. **Extent of Development:** (to Jan. 1, 1936) 12 wells, 5 gas, 7 failures; (During 6 months, 1936) 1 failure. **Deepest Hole:** Henderson Coquat, Charles H. Wedding 1, abd 2410 ft. **Daily Production, Aug. 1, 1936:** None.

*Prospect. †Salt dome, no production. ‡Gas field.

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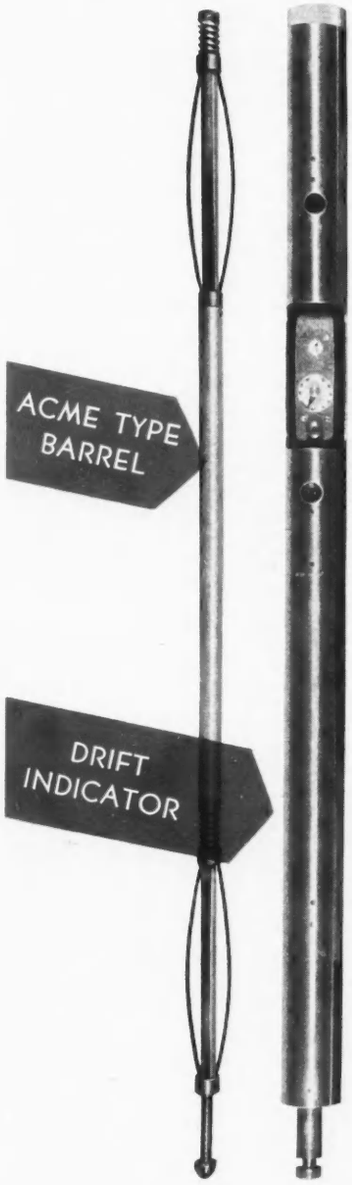

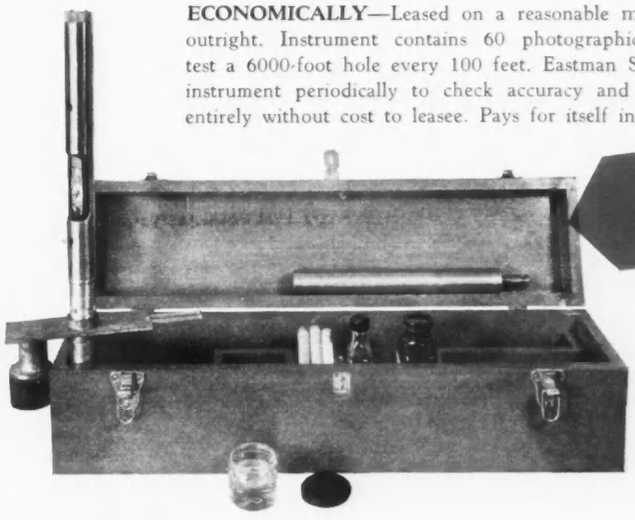

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Rigs Running, Aug. 1, 1936: One. **Market Outlets:** Shut in. **Reserve Data:** Gas field. **Principal Leaseholders:** Henderson Coquat, Adolph Doovre, G. G. Mortimer, and others.

MAVERICK COUNTY

CHITTIM‡

Section 115, 116, 15 mi ne Eagle Pass. **Means of Discovery:** Surface geology. **Discovery Data:** Rycade Oil Corp.'s Chittim 1, 1929, 28,000,000 cu ft gas spraying 40 bbls high gravity oil, 2000 lbs pressure; total depth 5640 ft, producing horizon 5520-80 ft, elev 831 ft. Rycade Oil Corp.'s Chittim 3, Mar. 5, 1929, 150 bbls 44 gravity oil; total depth 3205 ft, deepened to 6535 ft, completed May, 1930, 12,000,000 cu ft gas in lime 5520-90 ft. **Geological Data:** Anticlinal structure. **Producing Horizon:** Gas in Glenrose, oil in Buda. **Producing Area:** Total 160 acres, none in oil. **Extent of Development:** (to Jan. 1, 1936) 17 wells, 4 gas, 13 failures. (During 6 months 1936) none. **Deepest Hole:** Rycade Oil Corp.'s Chittim 2, abd 7635 ft in Trinity. **Daily Production Aug. 1, 1936:** 15 bbls gasoline. **Rigs Running Aug. 1, 1936:** None. **Market Outlets:** Texas Gas Utilities Co., small gasoline plant in field. **Reserve Data:** See Remarks. **Principal Leaseholders:** Rycade Oil Corp., Stanolind Oil & Gas Co. has option on block. **Remarks:** This is primarily a gas field. Oil in the Buda was limited, and the well was deepened almost immediately after completion, hence records show no oil wells. Small amount of gasoline being stripped of gas.

McMULLEN COUNTY

BYRNE PASTURE*

George Pittuck Survey, 3 mi w Callihan. **Means of Discovery:** Geological information, trend play. **Extent of Development:** About 6 shallow wells have been drilled. John F. Camp Drilling Co.'s C. E. Byrne Estate 2 blew out Apr. 20, 1936 at 500 ft, but was killed and deepened to 995 ft and abd. Several other wells in area have had oil showings. Another test is active. **Principal Leaseholders:** John F. Camp, Ike Taylor.

CALLIHAM

James Pittuck, Roderick O'Boyle, Michael Hely, E. W. B. Scrugham, James Garner surveys, 1 mi n Callihan. **Means of Discovery:** Geological information, oil seeps. **Discovery Data:** Grubstake Inv. Co.'s Brown 1, Nov. 16, 1918, 40,000,000 cu ft gas, 876 ft, producing horizon 848-76 ft, 5 3/16-inch casing 797 ft. C. A. Hall's H. L. Lark 1, July 17, 1934, 20 bbls, 1053 ft, producing horizon 1050-53 ft, later abd. **Geological Data:** Sand lensing with se dip. **Producing Horizon:** Upper gas/oil production from Mirando sand in Hockleyensis. Lower production in Pettus sand in Cockfield, top of Jackson 480 ft. **Producing Area:** 740 acres, 320 acres oil. **Extent of Development:** (to Jan. 1, 1936) 126 wells, 63 oil, 25 gas, 38 failures; (During 6 months 1936) 11 wells, 6 oil, 5 failures. **Deepest Hole:** Houston Gulf Gas Co.'s John Stitts 2, abd 3000 ft. **Daily Production, Aug. 1, 1936:** 198 bbls. **Rigs Running, Aug. 1, 1936:** 5. **Market Outlets:** Trucks. **Reserve Data:** 880,000 bbls ultimate from proven area; 514,267 bbls recovered to Jan. 1, 1936. 37,026 bbls recovered first 6 months 1936. **Principal Leaseholders:** Luray Oil Co., South Texas Oil Co., Grubstake Inv. Co., Lightfoot et al, San Balt Petroleum Co., W. M. Stephenson, Charles Wuest, Jr., Benson et al.

CROWTHER*

Centering around J. Freal Survey, in and around town of Crowther. **Means of Discovery:** Oil in water wells. **Extent of Development:** A number of producing oil wells were drilled 1915 to 1920, developing small production of 18 gravity oil at 500 ft in the top Diboll. They recovered in the neighborhood of 25,000 bbls of oil, which contained excellent lubricating qualities and now the pool is abandoned. Casing has been pulled in all of the wells.

JACOB

John Fadden, J. O'Boyle, M. Pittuck, W. H. Jacobs Surveys, Nos. 7, 5, 8, 10, L. Jacob Survey No. 615, William D. Benham Survey No. 8, E. W. B. Scrugham Survey, 2 mi n Callihan. **Means of Discovery:** Geological information, oil discovered as result of subsurface correlations on abandoned tests and shallow gassers. **Discovery Data:** Southern Natural Gas Co.'s L. Jacob 1, 1926, 10,000,000 cu ft gas, total depth 788 ft, sand 780-88 ft, elev 288 ft. Jacob, Buzzini & Pickett (now Loma Oil Co.) L. Jacob 2-A, Apr. 24, 1932, 240 bbls 20.6 gravity oil; total depth 962 ft, shells 948-52 ft, sandy shale 954-58 ft, sand 958-62 ft, 6⅝-in csg 947 ft, 1-in choke, elev 286 ft. **Geological Data:** Sand lens on large regional structure (Crowther Manocline). **Producing Horizon:** Mirando sand gas; Pettus sand oil; all Jackson age. **Producing Area:** 1400 acres. **Extent of Development:** (to Jan. 1, 1936) 101 wells, 75 oil, 4 gas, 22 failures. (During 6 months 1936) 10 wells, 7 oil, 3 failures. **Market Outlets:** Cardinal Pipe Line Co. 4-in to loading racks at Whitsett; some shipped by truck. **Daily Production Aug. 1, 1936:** 630 bbls. **Rigs Running Aug. 1, 1936:** Five. **Reserve Data:** 3,010,000 bbls ultimate from proven area; 551,268 bbls recovered to Jan. 1, 1936; 87,085 bbls recovered first 6 months 1936. **Principal Leaseholders:** Loma Oil Co., C. R. Kennod, Light Stephenson; Lightfoot et al, Thelma Oil Co., Jane Oil Co., Longhorn Oil Co., Motes & Bedengfield, Texas Inland Oil Co., Ike Taylor.

LOMA ALTA

Section 13, M. J. Dean Survey, near Loma Alta. **Means of Discovery:** Subsurface geology. **Discovery Data:** Texlo Oil Co. et al's Atkinson 1, May 29, 1935, 250 bbls 21 gravity oil, ⅛-in choke, 50 lbs tubing, 235 lbs casing pressure; total depth 2207 ft, producing horizon 2195-2207 ft, elev 700 ft. **Geological Data:** Sand lensing and faulting control production. **Producing Horizon:** Chernosky sand (Hockleyensis). **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 5 wells, 2 oil, 3 failures. (During 6 months 1936) 2 failures. **Deepest Hole:** V. G. Schimmell & Loma Oil Co.'s R. Hagist 1, abd 2766 ft, May 25, 1936. **Daily Production Aug. 1, 1936:** 80 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet.** Magnolia Pipe Line Co. **Reserve Data:** 120,000 bbls ultimate from proven area; 12,385 bbls recovered to Jan 1, 1936; 13,390 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Texlo Oil Co., Darby Petroleum Co., Illinois Petroleum Co.

LOWE RANCH*

Near central portions of Lowe Ranch, 6 mi sw Tilden. **Means of Discovery:** Geological information, oil shows in water wells. **Extent of Development:** More than 20 wells have been drilled, several developing small production in the Mirando sand around 400 ft. Oil contains ichthyol. Several wells have been drilled to around 1500 ft and Magnolia Petroleum Co.'s Kincaid 1, 2 mi sw drilled to 4670 ft. There is some evidence of faulting of normal dip, but production is mainly as a result of sand lensing.

RHODE‡

Sections 78 and 86, se portion of county. **Means of Discovery:** Geological information. **Discovery Data:** Magnolia Petroleum Co.'s Kincaid 2, May 1, 1936, 20,000,000 cu ft gas, open tubing 90 lbs, casing pressure 620 lbs; total depth 3153 ft, producing horizon 1810-22 ft, elev 545 feet, plugged back to 1810 ft and redrilled to 1822 ft, showed shut-in pressure 650 lbs. **Geological Data:** Sand lens apparent faulting to west. **Producing Horizon:** Cole of Upper Jackson. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 2 failures. (During 6 months 1936) 3 wells, 2 gas, 1 failure. **Deepest Hole:** Magnolia Petroleum Co.'s Kincaid 1, abd 3356 ft, Mar. 18, 1936. **Daily Production Aug. 1, 1936: Only gas. Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Reserve Data:** Gas field. **Principal Leaseholders:** Magnolia Petroleum Co., Sun Oil Co., Al Buchanan, Rowan & Hope, Barbara Oil Co., Whisenent & Trenchard, Humble Oil & Refining Co., Felmont Oil Co., Texlo Oil Co., and others.

SOUTH CALLIHAM ‡

F. Faddin, M. Hely Surveys, 2½ mi s Callihan. **Means of Discovery:** Surface and subsurface information. **Discovery Data:** W. B. Howard et al's B. Claunch 1-A, Nov. 19, 1934, 10,000,000 cu ft gas, 780 ft. **Geological Data:** Some lensing and faulting. **Producing Horizon:** Claiborne. **Producing Area:** 550 acres. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 7 gas, 4 failures. (During 6 months, 1936) 1 failure. **Deepest Hole:** Beer & Witherspoon's Ezzell 1, abd 1533 ft. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** One. **Market Outlets:** United Gas System. **Reserve Data:** Gas field. **Principal Leaseholders:** Carpenter et al, Southwest Oil Co., Howeth & Swiger, B. Masterson.

WENTZ‡

Southwest of townsite of Wentz, east central part of county, centering Sections 59, 63, 64, 65, 66 and 72. **Means of Discovery:** Geological information, surface work. **Discovery Data:** V. G. Schimmell et al's F. A. Hale 1, Feb. 3, 1932, 4,000,000 cu ft gas, 200 lbs rock pressure; total depth 382 ft, producing horizon 370-82 ft, elev 200 ft, 6⅝-in csg 366 ft. **Geological Data:** On large surface nose reflecting from small subsurface nose. **Producing Horizon:** Cole sand, Jackson age. **Producing Area:** 125 acres. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 3 gas, 8 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** V. G. Schimmell's Two River Ranch 1, abd 1654 ft, gas sand 773-85 ft, blew out, ran wild, but controlled and drilled deeper, second well set casing at this sand but also blew out and was lost. **Daily Production:** Only gas. **Rigs Running:** None. **Market Outlet:** None. **Reserve Data:** Gas field. **Principal Leaseholders:** V. G. Schimmell, Darby Petroleum Co. **Remarks:** Some possibility of a small Mirando or Pettus oil field.

MEDINA COUNTY

CHICON LAKE

M. W. Hewitt No. 39 and B. S. Reid No. 19 Surveys, 5 mi n Natalia, 1 mi sw Pearson. **Means of Discovery:** Geological data. **Discovery Data:** Pearson Oil Co.'s San Antonio Irrigated Farms 1, June 12, 1929, 2,000,000 cu ft gas, 350 lbs rock pressure, total depth 1071 ft, producing horizon 780-820 ft, elevation 738 ft, total depth in serpentine, plugged back to 850 ft, set 6⅝-inch casing 780 ft, gas sand 530 ft, top serpentine 938 ft. Pearson Oil Co.'s San Antonio Irrigated Farms 2, July 10, 1929, 3 bbls 33.7 gravity oil, 1414 ft, serpentine 1030 ft, chalk 1402 ft, set 6⅝-in 676 ft, top sand at same levels, elev 753 ft, back to 841 ft. Pearson Oil Co.'s San Antonio Irrigated Farms 2-A, July 12, 1929, 2 bbls 19 gravity oil, total depth 250 ft, top sand 230 ft. Pearson Oil Co.'s San Antonio Irrigated Farms 5-A, Dec. 15, 1929, 100,000 cu ft gas, total depth 485 ft, top sand 479 ft, set 6⅝-in same level, 140 lbs rock pressure. **Geological Data:** Structure doming over serpentine plug. **Producing Horizon:** Navarro-Taylor series. **Producing Area:** 750 acres, 250 acres oil. **Extent of Development:** (to Jan. 1, 1936) 40 wells, 22 oil wells, 6 gas, 12 failures. (During 6 months 1936) 1 oil well. **Deepest Hole:** Thomas & Tarver's Mangold 1, abd 1700 ft, serpentine 930 ft, Edwards lime 1640 ft. **Daily Production, Aug. 1, 1936:** 17 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Trucks. **Reserve Data:** 75,000 bbls ultimate from proven area. 16,462 bbls

*Prospect. †Salt dome, no production. ‡Gas field.

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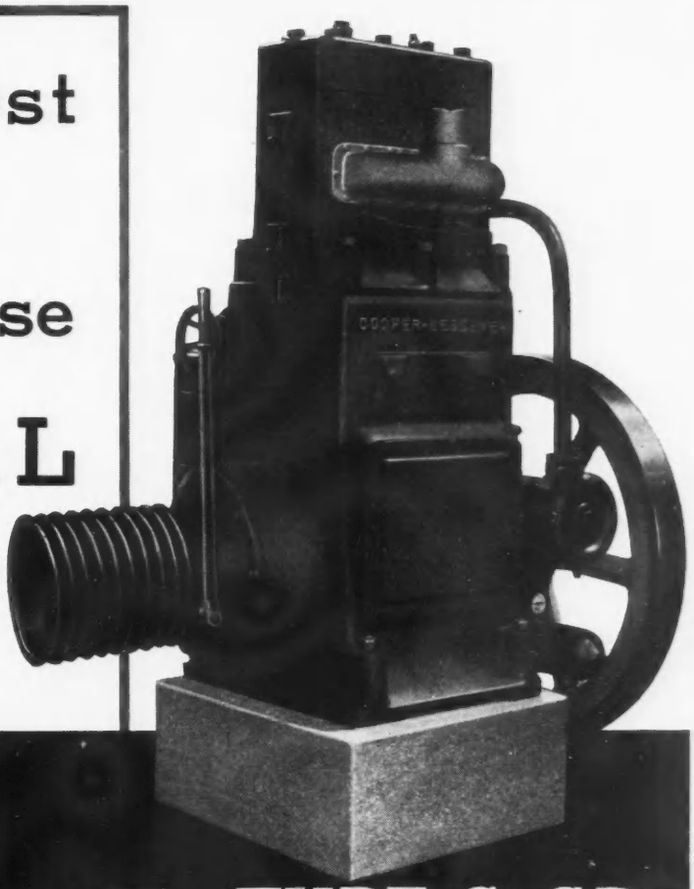

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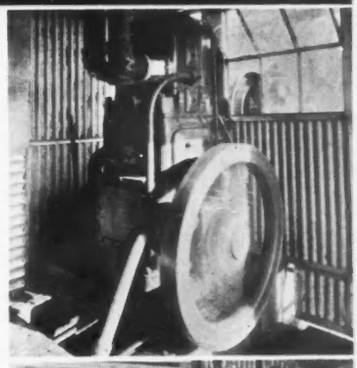

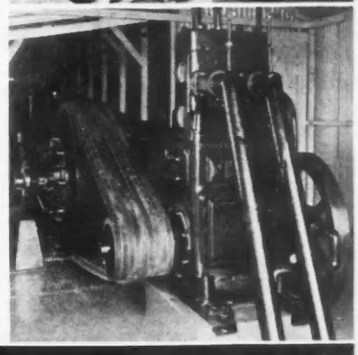

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CENTRAL POWER AND LIGHT COMPANY

IN SOUTH AND SOUTHWEST TEXAS

recovered to Jan. 1, 1936. 2488 bbls recovered first 6 months 1936. **Principal Leaseholders:** Charles H. Wagener, W. L. Umburn, F. H. Eckert and others. J. E. Whiteside.

DEVINE*

Centering around Survey No. 33½, G. Petty grant, 4 mi se Devine. **Means of Discovery:** Geological information, surface and subsurface. **Extent of Development:** W. C. Campbell et al (was Falvey & Hill) McNenemy 1, abd May 24, 1936, drilled to 2892 ft, plugged back to 2190 ft and attempted to complete in sand and sandy shale section from 1918-2190 ft, well flowed a little oil, put on pump, but could not overcome mud. **Principal Leaseholders:** R. V. Hill, Ed Falvey, W. C. Campbell, M. Coffey and others.

MILAM COUNTY

MINERVA-ROCKDALE

J. A. De Pena, W. Allen, S. P. Carson, C. S. Robertson, Jose Leas and other Surveys, centering around Rockdale. **Means of Discovery:** Geological information. **Discovery Data:** Oklahoma-Bell Oil Co.'s Isaacs 1, Feb. 17, 1921, 20 bbls 37.6 gravity oil, 950 ft, elev 450 ft. **Geological Data:** Production from shale and sand lenses, varying up to 1100 ft in thickness, some faulting. Area 7 mi long, 2 mi wide. **Producing Horizon:** Navarro-Taylor series. **Producing Area:** 4250 acres. **Extent of Development:** (to Jan. 1, 1936) 663 wells, 616 oil, 4 gas, 43 failures. (During 6 months 1936) 3 wells, 1 oil, 2 failures. **Deepest Hole:** Texas Petroleum Dev. Co.'s Milton Phillips 1, abd 3711 ft. **Daily Production, Aug. 1, 1936:** 215 bbls. **Rigs Running, Aug. 1, 1936:** One. **Market Outlets:** Minerva Pipe Line Co. has pipe line connections to local market. Some shipped by trucks. **Reserve Data:** 3,612,500 bbls ultimate from proven area; 3,210,361 bbls recovered to Jan. 1, 1936; 40,710 bbls recovered first 6 months 1936. **Principal Leaseholders:** Bartlett Production Co., Brady Bros., Bynum & Palmer, Central Oil Co., Clear Lake Oil Co., Erie Investment Ltd., Ernest Oil Co., Glass Bros., Hefley McIntosh & Thomas, W. A. Jones, Lanning & Coffield, Minerva Refining Co., Noack & Lanning, Roundtree & Candle, Wahpoo Oil Co.

NUECES COUNTY

AGUA DULCE

Andres F. de la Fuente, Antonio Longorio, Puenticitas and adjoining grants. 1½ mi se Agua Dulce. **Means of Discovery:** Geological data, based mainly on correlations of shallow water wells, some surface work. **Discovery Data:** Grimm & Yackey and Houston Oil Co.'s Anderson 1, Dec. 31, 1928; 30,000,000 cu ft gas, 2025 ft, elev 12½ ft. Houston Oil Co.'s Comstock 1, Dec. 23, 1930, 40,000,000 cu ft, 135 bbls 60 grav oil, total depth 4913 ft, producing horizon 4902-13 ft, top Marine Oligocene 3565 ft. **Geological Data:** Elongated dome with approximately 80 ft of closure, pitches to the west, indicating fault on that side of dome. **Producing Horizon:** Two shallow gas sands from Oakville, near top of formation. Oil and gas sand from Marine Oligocene or Frio. **Producing Area:** 8500 acres, 480 acres oil. **Extent of Development:** (to Jan. 1, 1936) 49 wells, 15 oil, 24 gas, 8 failures. (During 6 months 1936) 2 oil wells. **Deepest Hole:** Sullivan-Texon Royalty Co.'s Simmonds & Perry 1, abd 6510 ft, elev 90 ft. **Daily Production, Aug. 1, 1936:** Oil wells shut in. **Rigs Running, Aug. 1, 1936:** One. **Market Outlets:** United Gas System, several gasoline plants in field. **Reserve Data:** 2,400,000 bbls ultimate from proven area. 201,808 bbls recovered to Jan. 1, 1936. 5804 bbls recovered first 6 months 1936. **Principal Leaseholders:** United Production Co., Houston Oil Co., Sullivan and Texon Oil and Royalty Co., Parker, Foran and Knode. **Remarks:** Average initial production per well is 47,000,000 cu ft of sulphur gas from upper horizons, rock pressure 860 pounds.

BALDWIN

B. S. & F. 165, J. H. Smith, Wm. Coty, J. S. McGregor surveys, 2½ mi sw Clarkwood. **Means of Discovery:** Geological information. **Discovery Data:** Magnolia Petroleum Co.'s J. C. Baldwin 1, July 9, 1935, 432 bbls, ¼-in choke, 25.8 gravity, total depth 3879 ft, producing horizon 3874-79 ft, elev 58 ft derrick floor, later put on pump and made 802½ bbls per day. M. L. Sanders 2, Nov. 27, 1935, 655.08 bbls, 2-in gate on 2½-in tubing, 200 lbs. tubing pressure, 24.8 gravity oil; total depth 4066 ft, producing horizon 4060-64 ft, elev 58 ft derrick floor. J. C. Baldwin 4, Dec. 3, 1935, 20,000,000 cu ft gas, 2-/15-in choke, 460 lbs. tubing, 700 lbs. casing pressure, total depth 5195 ft, producing horizon 3223-38 ft, plugged back to 3244 ft and perforated, pressure later built up to 1150 lbs. tubing, 1400 lbs. casing. **Geological Data:** Sand lensing, apparently some faulting. **Producing Horizon:** Shallow gas from Oakville (Upper Miocene) deeper oil from base of Miocene. **Producing Area:** 280 acres, 240 acres oil. **Extent of Development:** (to Jan. 1, 1936) 10 wells, 6 oil, 1 gas, 3 failures; (during 6 months 1936) 3 wells, 1 oil, 2 failures. **Deepest Hole:** Magnolia Petroleum Co.'s Baldwin 2, abd 6610 ft. **Daily Production, Aug. 1, 1936:** 502 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Texas Pipe Line Co. **Reserve Data:** 1,920,000 bbls ultimate from proven area. 77,119 bbls recovered to Jan. 1, 1936. 144,902 bbls recovered first 6 months 1936. **Principal Leaseholders:** Magnolia Petroleum Co., Violet Oil Co., Texon Royalty Co., Gilcrease Oil & Gas Co., Heyser & Heard.

BUCKHOLT

J. Ward Survey, Section 316, 2 mi se Clarkwood. **Means of Discovery:** Geological information. **Discovery Data:** Sherman Nelson et al's Buckholt 1, Jan. 2, 1936, 110 bbls oil and 80 bbls salt water, 5/32-in choke, total depth 5009 ft, elev 55 ft, perforate 3155-76 ft. **Geological Data:** Sand lens on domal type structure. **Producing Horizon:** Oligocene. **Producing Area:** 30 acres. **Extent**

*Prospect. †Salt dome, no production. ‡Gas field.

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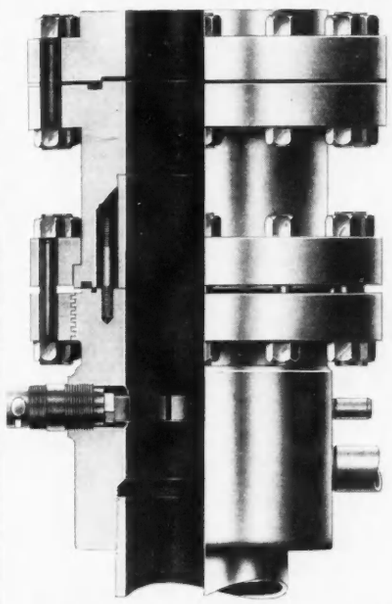
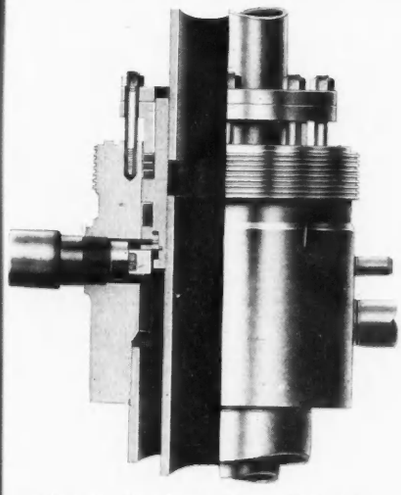


View showing head while well is being drilled and also position of dogs while casing is being run.



View showing head after well has been completed.

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of Development: (During 6 months 1936) 2 oil wells. **Deepest Hole:** Discovery well. **Daily Production, Aug. 1, 1936:** 8 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Trucks. **Reserve Data:** Included in Saxet. **Principal Leaseholders:** Lee Brothers, J. H. Coper, Sherman Nelson, Surray Oil Co.

CLARA DRISCOLL

Centering around William Gamble Survey, 1¾ mi ne Driscoll. **Means of Discovery:** Geological survey, subsurface information. **Discovery Data:** Santa Clara Oil Co.'s Clara Driscoll Sevier 1, Nov. 20, 1935, 1968 bbls 25.3 gravity oil, 400 lbs tubing, 500 lbs casing pressure, total depth 3816 ft, producing horizon 3807-16 ft, 7-in casing set 3808 ft. O. W. Killam's Betty Ellick 1, June 28, 1936, total depth 3899 ft, blew out from sand 3872-99 ft, ran wild several days blowing tremendous amount of gas, considerable oil and salt water. Finally killed and plugged back to about 3270 ft, perforated casing 3258-68 ft, complete as wet gasser, 1380 lbs tubing, 1450 lbs casing pressure. O. W. Killam's Betty Ellick 2, Aug. 5, 1936, 60,000,000 cu ft gas, ¼-in choke, 1475 lbs working pressure, 1625 lbs shut in pressure, perforated casing 3887-95 ft. **Geological Data:** Sand lens on Domal type structure. **Producing Horizon:** Catahoula. **Producing Area:** 40 acres, 20 acres oil. **Extent of Development:** (to Jan. 1, 1936) 1 oil well. (During 6 months 1936) 3 wells, 1 gas, 2 failures. **Deepest Hole:** W. L. Hinds' Edwin Flato, abd 6007 ft, July 10, 1936. **Daily Production, Aug. 1, 1936:** 125 bbls. **Rigs Running, Aug. 1, 1936:** Two. **Reserve Data:** 200,000 bbls ultimate from proven area. 4829 bbls recovered to Jan. 1, 1936. 27,394 bbls recovered first 6 months 1936. **Principal Leaseholders:** Santa Clara Oil Co., Houston Oil Co., Pan-American Petroleum Co., Marathon Oil Co., Hinds et al, The Texas Co., O. W. Killam, Stanolind Oil & Gas Co.

FLOUR BLUFF

Section 48, Flour Bluff Encinal Garden Tracts, 11½ mi sw Corpus Christi. **Means of Discovery:** Geophysical survey, geological information obtained from nearby well. **Discovery Data:** M. F. Hurlburt et al's J. O. Phillip 1, July 8, 1936, 213 bbls 43.3 gravity oil, 5/32-in choke, 900 lbs tubing, 1160 lbs casing pressure, total depth 7503 ft, producing horizon 6633-57 ft. Drilled to total depth, ran electric formation tester, plugged back and set casing at 6850 ft, perforated at 6633-43 ft and 6647-57 ft. **Geological Data:** No definite information, but likely anticlinal. **Producing Horizon:** Marginulina, topped at 6325 ft. **Producing Area:** 20 acres. **Extent of Development:** One failure drilled on block prior to January 1, 1936. No completions first six months 1936. **Deepest Hole:** Discovery well: **Daily Production, Aug. 1, 1936:** 135 bbls. **Rigs Running, Aug. 1, 1936:** Four locations. **Reserve Data:** New field, no information as yet. **Principal Leaseholders:** Solid block Humble Oil & Refining Co. holds ½ interest, Barnsdall Oil Company, ¼ interest, Hurlburt ¼ interest, also Gem Oil Co.

SAXET

Rincon del Oso, J. Frank, E. Villareal, J. Dunn, A. Roberts, H. B. Shepherd and H. L. Kinney Surveys, Sections 591, 312, 689, 211, 5, etc., 5 mi w Corpus Christi. **Means of Discovery:** Geological information led to discovery of shallow gas. **Discovery Data:** Saxet Oil Co.'s John Dunn 1, Jan. 18, 1923, 35,000,000 cu ft gas, total depth 2408 ft, sand 2288-2408 ft. Saxet Oil Co.'s Donegan 1, July 11, 1930, 30,000,000 cu ft gas spraying little oil, depth 4089 ft, sand 4069-86 ft, elev 49 ft. Saxet Oil Co.'s Dunn 6, Aug. 22, 1930, 150 bbls 25 gravity oil with 800 bbls salt water, total depth 4304 ft, sand 4290-4304 ft, elev 50.7 ft. L. L. Smith's Hunter 1, July 3, 1931, 30,000,000 cu ft gas, sand 3357-70 ft, 1350 lbs rock pressure. Houston Oil Co.'s Harrell 2, Aug. 5, 1931, sand 2735-40 ft, elev 57 ft, completed as gasser. The following well probably is in the above gas sand. Gulf Coast Oil Co.'s Bessie Elder 2, July 2, 1932, 100 bbls, sand 2732-40 ft, elev 54.2 ft, 1000 lbs rock pressure. Violet Oil Co.'s McGregor 1, June 19, 1932, total depth 4875 ft, sand 4862-75 ft, elev 50 ft, initial production 300 bbls oil per day, 3/8-in choke, 1050 lbs rock pressure. Houston Oil Co.'s Harrell 2-A, Sept. 28, 1932, 100 bbls oil, 3/8-in choke, sand 4400-09 ft, elev 55 ft, 250 lbs tubing pressure. A. F. Holliday's J. Griffith 1, July 5, 1935, 25,000 cu ft gas and 35 bbls 58.9 gravity oil, 1/8-in choke. 1975 lbs equalized pressure, total depth 5602 ft, sand 5598-5602 ft. A. F. Holliday's F. J. Smith 2-A, Sept. 8, 1935, large gasser spraying 20 bbls gasoline, 3/16-in choke, 2275 lbs equalized pressure, sand 5785-92 ft, 7-in casing 5785 ft. A. F. Holliday's F. J. Smith 2-B, Sept. 16, 1935, 400 bbls oil, 3/16-in choke, 750 lbs tubing, 1000 lbs casing pressure, total depth 4724 ft, sand 4720-24 ft, 7-in 4720 ft. Shell Petroleum Corp.'s Ed. F. Flato 1, Nov. 1, 1935, 562 bbls oil, 5/16-in choke, 325 lbs tubing, 425 lbs casing pressure, total depth 7006 ft, plugged back 4610 ft, set 7-in casing, perforate 4542-50 ft. A. F. Holliday's J. Griffith 1, Apr. 7, 1936, deepened from 5602 to 5844 ft, flowed 512 bbls 39.9 gravity oil, 5/32-in choke, 700 lbs. tubing, 875 lbs casing pressure, sand 5816-44 ft, liner set on bottom and perforated 5818-28 ft. **Geological Data:** Elongated dome, sand lensing. Considerable faulting through field with production on both sides of fault. **Producing Horizon:** Shallow gas from Oakville and oil and gas sands continue into the Frio. 5800-ft sand now being developed in Frio. **Producing Area:** 7750 acres, 2260 acres oil. **Extent of Development:** (to Jan. 1, 1936) 155 wells, 97 oil, 33 gas, 25 failures. (During 6 months 1936) 76 wells, 67 oil, 1 gas, 8 failures. **Deepest Hole:** Southern Minerals Corp.'s Rand Morgan 1, abd 7190 ft, July 5, 1935. **Daily Production, Aug. 1, 1936:** 13,425 bbls. **Rigs Running, Aug. 1, 1936:** 35. **Market Outlet:** Texas Pipe Line Co., Republic Pipe Line Co., Potter Pipe Line Co., Southern Pipe Line Co., and others. **Reserve Data:** 20,001,000 bbls ultimate from proven area. 3,319,-327 bbls recovered to Jan. 1, 1936. 1,594,351 bbls recovered first 6 months 1936. **Principal Leaseholders:** Phillips Petroleum Co., Southern Minerals Corp., Republic Natural Gas Co., Morgan-Gulf Oil Corp., Heep Oil Corp., Shell Petroleum Corp., Benson & Corgy, V. L. Blanchard, R. B. Bryant, W. W. Chapman, Conroe Drilling Co., J. K. Culton, Tom Graham, Great States Oil Co., W. B. Hinton, A. F. Holliday et al, Houston Oil Co., Magnolia Petroleum Co., Richardson Production Co., Texon Royalty Co., Wynn Drilling Co.

*Prospect. †Salt dome, no production. ‡Gas field.

SAXET HEIGHTS—(Corpus Christi)

E. Villareal Survey and residential subdivision extending west from Corpus Christi. **Means of Discovery:** Geological information. **Discovery Data:** J. K. Culton's Baldwin et al 1, Nov. 2, 1935, 2,000,000 cu ft gas, 62 bbls 25 gravity oil, 5/32-in choke, 1350 lbs. tubing, 1650 lbs casing pressure; total depth 4082 ft, producing horizon 4076-82 ft. **Geological Data:** Sand lensing on anticlinal structure. **Producing Horizon:** Catahoula. **Producing Area:** 1050 acres, 750 acres oil. **Extent of Development:** (to Jan 1, 1936) 4 oil wells; (During 6 months 1936) 121 wells, 111 oil, 5 gas, 5 failures. **Deepest Hole:** Tom Graham and Republic Natural Gas Co.'s Whelan 1, total depth 5254 ft, plugged and perforated 4058-60 ft, completed as gasser with 1450 equalized pressure, May 5, 1936. **Daily Production, Aug. 1, 1936:** 7885 bbls. **Rigs Running, Aug. 1, 1936:** 37. **Market Outlets:** Potter Pipe Line Co., Texas Pipe Line Co., Corpus Christi Refining Co., Taylor Refining Co., Republic Pipe Line Co. **Reserve Data:** 4,800,000 bbls. ultimate from proven area. 9335 bbls recovered to Jan. 1, 1936. 704,073 bbls recovered first 6 months 1936. **Principal Leaseholders:** Republic Natural Gas Co., J. K. Culton, W. A. Richardson et al, Southern Minerals Corp., W. H. Harrison and R. Y. Walker, Conroe Drilling Co., Cox & Reed, Morgan Bros., Pedernal Oil Co., Westgate Oil Co., and others.

STRATTON‡

Sections 12 and 13, C. E. Stratton subdivision, 8 mi n Kingsville. **Means of Discovery:** Geophysical prospect. **Discovery Data:** Stanolind Oil & Gas Co.'s Stratton 1, Dec. 18, 1931, 4,000,000 cu ft wet gas, sandy lime 4788-4801 ft, 5½-in casing set 4770 ft, 550 lbs working pressure on 5/16-in choke, built up pressure of 1850 lbs, closed in, well later deepened to 5002 ft, elev 115 ft. **Geological Data:** None available, likely domal type structure. **Producing Horizon:** Frio. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well, 1 failure. (During 6 months 1936) none. **Deepest Hole:** Stanolind Oil & Gas Co.'s Stratton 2, abnd 6904 ft, Oct. 12, 1934, had sand 6303-14 ft showing for gasser spraying distillate. **Daily Production, Aug. 1, 1936:** Gasser—shut in. **Rigs Running, Aug. 1, 1936:** None. **Principal Leaseholders:** Stanolind Oil & Gas Co., La Jita Corp.

REFUGIO COUNTY

BONNIE VIEW*

Centering in the Bonnie View Ranch, se Woodsboro. **Means of Discovery:** Geological and geophysical information and surface indications. **Extent of Development:** A number of deep failures have been drilled in the general district, but none have established production. Holland Oil Co.'s Peck 1, E. Lopez Survey No. 44, abd 1934, showing a small amount of 35.6 gravity oil at 5327.51 ft. Mills Bennett's Fred Walzell, E. Lopez Survey, found several sands corresponding those in the Peck well, including one at 5995-6000 ft. All carried shows of oil and gas, but developed salt water on tests, abn July 19, 1936, 6314 ft. E. W. Price et al on Dick Woods Ranch, abd 6104 ft, Sept. 10, 1936.

FOX

Hews & Brown Survey, 3 mi ne Refugio. **Means of Discovery:** Geological information, based on subsurface information and surface indications, dip in Lissie, Beaumont contract. **Discovery Data:** United Production Co.'s W. J. Fox 1-A, May 14, 1931, 672 bbls 58 gravity oil, 5886 ft. 5½-in casing 5877 ft, sand 5878-86 ft, tubing 675 lbs, casing 725 lbs, ¼-in chokes. United Production Co.'s W. J. Fox 2-A, Jan. 12, 1932, 6474 ft, 235 bbls 23.5 gravity oil, 5½-in casing 6464 ft, casing pressure 1500 lbs, tubing 1350 lbs, ¼-in choke. United Production Co.'s W. J. Fox 17, May 3, 1936, 25,000,000 cu ft dry gas, 2000 lbs shut-in, total depth 6295 ft, 5-in 6248 ft, plugged back 4995 ft, perforated 4968-84 ft. **Geological Data:** Domal type structure, sand lenses rather spotted. **Producing Horizon:** Gas just above top of Frio, oil in Frio. **Producing Area:** 450 acres, 320 acres oil. **Extent of Development:** (to Jan. 1, 1936) 10 wells, 8 oil, 2 failures. (During 6 months 1936) 3 wells, 2 oil, 1 gas. **Deepest Hole:** United Production Co.'s W. J. Fox 2-A, (see above). **Daily Production, Aug. 1, 1936:** Included in Refugio. **Rigs Running, Aug. 1, 1936:** 2. **Market Outlets:** Atlantic Pipe Line Co., Humble Pipe Line Co. **Reserve Data:** (Included in Refugio). **Principal Leaseholders:** United Production Corp., Houston Oil Co., Hewitt & Dougherty.

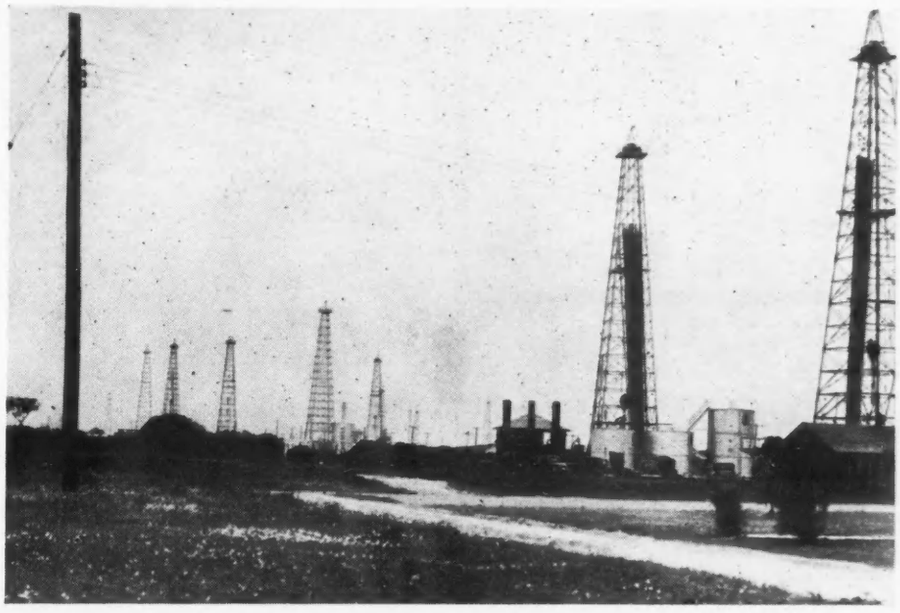
FRIEDLINE PASTURE*

Friedline Pasture, Juan Pabedano Survey, at Aransas river on San Patricio County line, near Plymouth field. **Means of Discovery:** Seismograph and magnetometer work and surface geology. Abnormal swing in Lissie-Beaumont contact. **Extent of Development:** Hiawatha Oil Co. has 3200-acre block in R. H. Welder Ranch upon which contract has been made to drill two 7000-ft tests, first now being active. **Principal Leaseholder:** Hiawatha Oil Company.

GRETA

E. H. Winfield, John Peoples, M. S. Zimenes, N. S. Crunk, Hughes & Brown, James T. McGrew and C. A. Hardwick Surveys, centering around town of Greta. **Means of Discovery:** Geological data and trend play, abnormal swing in Lissie gravels into Beaumont clay. **Discovery Data:** George E. Smith and O. R. Seagraves' J. M. O'Brien 1, May 27, 1933, 530 bbls 21.6 gravity oil, total depth 4403 ft, sand 4376-4403 ft, ¼-in choke, elev 70 ft. E. M. Jones' J. M. O'Brien 1-G, Aug. 21, 1933, 40,-

Corpus Christi



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000,000 cu ft gas, 2135 ft, 925 lbs rock pressure. Floboots Oil Corp.'s F. F. B. Heard 1, Sept. 15, 1933, 20,000,000 cu ft gas, total depth 1729 ft, sand 1726-29 ft. Nesral Oil Co.'s Wilson Heard, Jr., 2, Sept. 27, 1933, 350 bbls 38.5 gravity oil, total depth 5918 ft, sand 5911-18 ft, elev 72 ft. United Production Co.'s Lambert 5, Dec. 14, 1933, 200 bbls oil, total depth 3501 ft, sand 3486-3501 ft. Hewitt & Dougherty's M. F. Lambert 19, Aug. 1, 1935, 246 bbls 35.5 gravity oil, 3/16-in choke, tubing pressure 980 lbs, total depth 6263 ft, sand 6249-61 ft, shale 6261-63 ft. Hewitt & Dougherty's M. F. Lambert 20, July 28, 1935, 382½ bbls 38.5 gravity oil, 3/16-in choke, tubing pressure 900 lbs. total depth 5866 ft, sand 5855-66 ft. This well is at the extreme south end of the Greta field and is producing from the Tomoconnor sand, marking the tie in of the two fields. Atlantic Oil Prod. Co.'s Tom O'Connor 5, originally a producer at 4397 ft, deepened to 6243 ft and completed 1935, 110 bbls 61.7 gravity distillate, two ¼-in chokes on tubing, sands at 5615-25, 5671-78 and 5705-09 ft were shown on electric formation tester, casing being set below this level and perforated in each sand. Edwin M. Jones' J. M. O'Brien 11-A, Dec. 12, 1935, 50,000,000 cu ft wet gas, ¼-in choke, casing pressure 2100 lbs, total depth 7461 ft, plug back and perforate in sand 5090-5160 ft, elev 69 ft. **Geological Information:** Domal type structure with several sand lenses. Deep horizon on se flank of structure, 3600-ft sand on extreme s flank, 4400-ft sand general, but broken up with breaks of shale and other materials. Number of shallow gas sands also general. Axis north and south. **Producing Horizon:** Gas sands starting in Oakville and continuing through Frio 3500-ft, oil production in Catahoula, 4400-ft oil in Heterostegina, lower oil sand in Frio. **Producing Area:** 5390 acres, 4420 acres oil. **Extent of Development:** (to Jan. 1, 1936) 239 wells, 216 oil, 8 gas, 15 failures. (During 6 months 1936) 2 wells, 1 oil, 1 failure. **Deepest Hole:** Edwin M. Jones' O'Brien 11-A, total depth 7461 ft. **Daily Production, Aug. 1, 1936:** 14,830 bbls. **Rigs Running, Aug. 1, 1936:** 3. **Market Outlets:** Atlantic Pipe Line Co., Humble Pipe Line Co., Texas Pipe Line Co. **Reserve Data:** 75,140,000 bbls ultimate from proven area. 9,976,497 bbls recovered to Jan. 1, 1936. 2,881,950 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Atlantic Oil Prod. Co., Stanolind Oil & Gas Co., Floboots Oil Corp., United Prod Co., Texas Gulf Prod. Co., Blanco Oil Co., Hewitt & Daugherty, Southwest Oil Corp., Edwin M. Jones.

GULF-O'CONNOR*

Southeast corner of 32, 404-acre ranch in CEPI&M Survey No. 254, near Goliad-Victoria County line. **Means of Discovery:** Geological information. **Extent of Development:** Gulf Production Co.'s O'Connor 2, Sept. 16, 1932, 50,000,000 cu ft gas 2000 lbs rock pressure, total depth 5710 ft, sand 5703-10 ft, elev 89 ft, drilled deeper, abn at 6860 ft February 15, 1933. Another test was a failure.

MATTIE WOODS RANCH*

Centering around S. Turner Survey on Bee County line, 7 mi w Refugio. **Means of Discovery:** Geophysical and geological work. **Extent of Discovery:** Santa Clara Oil Co.'s Mattie Woods 1, abd Jan. 27, 1935, 6381 ft, after finding several oil shows, the most important being in sand at 6078-87 ft. Magnolia Petroleum Co.'s Wood 1, abd 7705 ft in heaving shale June 3, 1935, topped Discorbis 3381 ft, Heterostegina 3525 ft, Vicksburg 5100 ft, and Jackson 6470 ft, elev 91 ft. **Principal Leaseholders:** Santa Clara Oil Co. has 400 acres out of the Wood Ranch and Magnolia Petroleum Co. 10,000 acres out of the same ranch. Latter company owns 6000 acres out of other tracts in the same area.

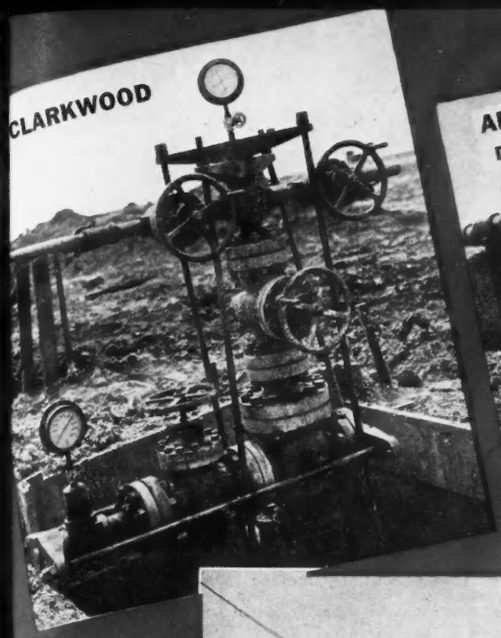
O'CONNOR (McFADDIN)

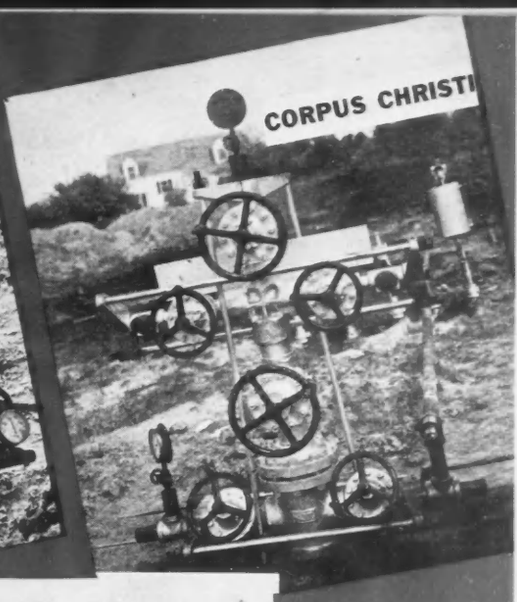
John Keating, F. Rios and Power & Hewitson Surveys, near Victoria County line. **Means of Discovery:** Geological and geophysical information. Faulting evidenced, surface indications. **Discovery Data:** Humble Oil & Refining Co.'s M. V. O'Connor 1, Dec. 1, 1931, 200 bbls 42 gravity oil; total depth 4155 ft, sand 4133-55 ft, did not hold up production, drilled deeper, abd 5972 ft. Humble Oil & Refining Co.'s M. V. O'Connor 2, 1932, 20,000,000 cu ft gas; total depth 5762 ft, plugged back 2238 ft, sand 2230-38 ft. M. V. O'Connor 3, Mar. 11, 1933, total depth 6860 ft, plugged back 2879 ft, sidetracked and drilled deeper to 3138 ft, sand 3130-38 ft, 5-in 3125 ft, 203 bbls 21 gravity oil, ⅝-in choke, tubing 220 lbs, casing pressure 180 lbs. **Geological Data:** Production on upthrow side of large fault with displacement of more than 450 ft. Downthrow side of fault to southeast. **Producing Horizon:** Miocene-Oligocene series. **Producing Area:** 250 acres, 140 acres oil. **Extent of Development:** 14 wells, 5 oil, 2 gas, 7 failures. (During 6 months 1936) none. **Deepest Hole:** Humble Oil & Refining Co.'s O'Connor 3 (see above). **Daily Production Aug. 1, 1936:** 265 bbls. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 1,260,000 bbls ultimate from proven area; 248,067 bbls recovered to Jan. 1, 1936; 47,282 bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co.

REFUGIO

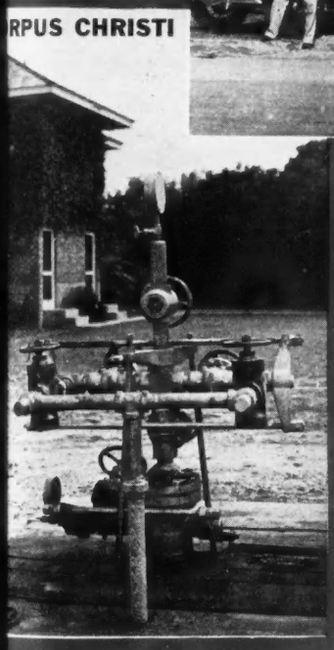
Refugio Town Tract, Thomas Mullin, Manuel Arocha, Isabella Surveys, centering around Refugio. **Means of Discovery:** Geological study, presence of gas in shallow water wells. Oil discovered by deepening shallower gas failure. **Discovery Data:** Theas Gulf Gas Association's F. V. W. Heard 1, Sept., 1920, 50,000,000 cu ft gas 1902 ft. During the next 8 years a series of tests drilled in various portions of the field developed high-pressure gas sands at intervals from discovery level to 3400 ft. Texas Gas Co.'s Clint Heard 1 (later sold to Benedum & Trees Oil Co.) July 28, 1928, 800 bbls 26 gravity oil; total depth 3702 ft, sand 3628-3702 ft. Mission Drilling Co.'s O'Brien 1, Sept. 26, 1929, 30,000,000 cu ft gas spraying 30 bbls 32 gravity oil, 5525 ft. Houston Gulf Gas Co.'s M. F. Lambert 1, Feb. 25, 1930, 350 bbls 30.9 gravity

*Prospect. †Salt dome, no production. ‡Gas field.





O-C-T Corpus Christi Store and South Texas Representatives: L. to R. Shelby Herron, Blondy McKee, A. J. Penich, Paul Vachon (on porch), C. J. Hillman and B. H. Britt.



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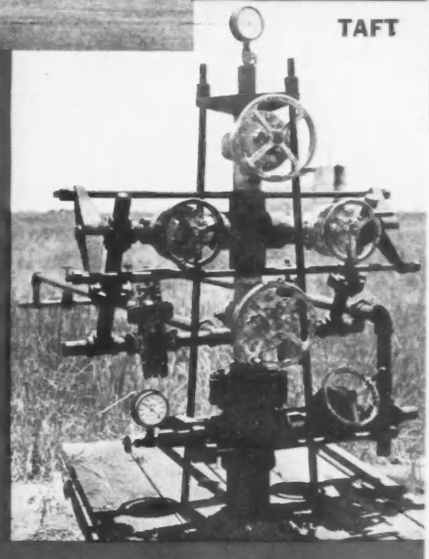
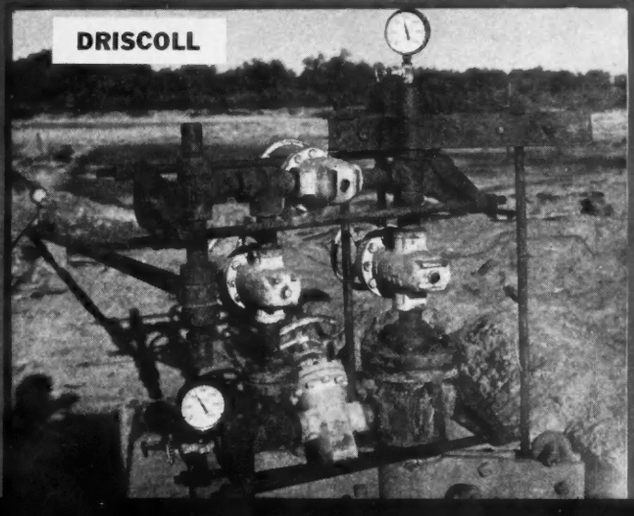




oil; total depth 5882 ft, sand 5879-81 ft. Union Producing Co.'s Rose Lambert 1-A, Apr. 1, 1930, 600 bbls 42 gravity oil; total depth 6475 ft, sand 6468-75, 3/16-in choke, salt water caused abandonment, but additional wells produced in the same horizon. Pearson Properties, Inc.'s Ryalls 1, June 11, 1932, 1200 bbls fluid, 47% sw, remainder oil, 6619 ft, sand 6606-19 ft. Houston Oil Co.'s F. B. Rooke 11, May 28, 1934, 760 bbls 31.4 gravity oil; total depth 4937 ft, sand and sandy shale 4922-37 ft, tubing pressure 430 lbs on 3/16-in choke, gasser in 3600-ft sand but was deepened. **Geological Data:** Domal type structure of rather large consequence, with series of sand lenses dipping off on the flanks, and rather spotted. Large domal proposition with minor saddles. **Producing Horizon:** Oil and gas from Miocene with deep oil and gas from Oligocene, mainly Frio section. **Producing Area:** 5850 acres, 3165 acres oil. **Extent of Development:** (to Jan. 1, 1936) 473 wells, 322 oil, 87 gas, 64 failures. (During 6 months 1936) 10 oil wells. **Deepest Hole:** Edwin M. Jones' Josephine Mitchell 1-B, abd 9131 ft 1932. **Daily Production Aug. 1, 1936:** 4795 bbls. **Rigs Running Aug. 1, 1936:** Two. **Market Outlets:** Atlantic Pipe Line Co., Houston Pipe Line Co., Humble Pipe Line Co., Texas Pipe Line Co., local buyers, 2 gasoline plants strip gas. Houston Oil Co. and United Gas Public Service Co. taking gas. **Reserve Data:** 42,727,000 bbls ultimate from proven area; 31,144,691 bbls recovered to Jan. 1, 1936; 865,861 bbls recovered first 6 months 1936. **Principal Leaseholders:** United Production Corp., Houston Oil Co., Phillips Petroleum Co., Larcro Gas & Petroleum Co., Moody Seagraves Corp., South Texas Prod. Co., The Texas Co., Traylor Prod. Co., Saxet Oil Co., George E. Strauch, D. D. Oil Co., G. K. Wheeler, W. L. Pearson Properties, Inc.

TOMOCONNOR

J. M. Swisher Survey, Blocks 3, 4, 5, 6, Chas. Hardwick, G. W. Main, Thos. Webb and J. Con Surveys, 9 mi ne Refugio. **Means of Discovery:** Geophysical information: **Discovery Data:** Quintana Petroleum Co.'s Tom O'Conner 1, June 26, 1934, 545 bbls 38.8 gravity oil; total depth 5580 ft, 7-in csg 5570 ft, sand 5574-80 ft, tubing pressure 425 lbs, casing 800 lbs, 3/8-in choke. **Geological Data:** Domal type structure. **Producing Horizon:** Frio. **Producing Area:** 1620 acres. **Extent of Development:** (to Jan. 1, 1936) 29 oil wells. (During 6 months 1936) 20 oil wells. **Deepest Hole:** Quintana Petroleum Co.'s Tom O'Connor 15-A; total depth 8174 ft, plugged back and set 7-in csg 5953 ft, perforated 5740-5825 and 5840-54 ft, completed Aug. 21, 1935, 155 bbls oil, 1/8-in choke, 350 lbs tubing pressure, 875 lbs casing. **Daily Production Aug. 1, 1936:** 3690 bbls. **Rigs Running Aug. 1, 1936:** Five. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 56,700,000 bbls ultimate from proven area; 571,861 bbls recovered to Jan. 1, 1936; 603,487 bbls recovered first 6 months 1936. **Principal Leaseholders:** Quintana Petroleum Corp., Hewitt & Dougherty, United Production Co.

SAN PATRICIO COUNTY

ANGELITA

Juan Hart Grant, 5 mi sw Odem. **Means of Discovery:** Trend play, geological information, surface indications. **Discovery Data:** Atkins & O'Neil and Continental Oil Co.'s J. F. Welder 1, Apr. 25, 1934, 180 bbls 31.5 gravity oil, 1/4-in choke, 1550 lbs tubing pressure, 1750 lbs casing; total depth 5382 ft, producing horizon 5376-82 ft, elev 60 ft, 7-in csg 5375 ft, cap 5374-75 ft. **Geological Data:** Small sand lens. **Producing Horizon:** From Frio. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 7 wells, 1 oil, 6 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Humble Oil & Refining Co.'s J. F. Welder 1, abd 7131 ft, Apr. 22, 1935. **Daily Production Aug. 1, 1936:** None. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 31,103 bbls ultimate from proven area; 31,103 bbls recovered to Jan. 1, 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Santa Clara Oil Co., Continental Oil Co.

ARANSAS‡

Section 40, Welder Ranch subdivision, 7 mi ne Sinton. **Means of Discovery:** Trend play, geological information. **Discovery Data:** Aransas Oil Co.'s E. H. Welder 1, Apr. 1, 1931, 30,000,000 cu ft gas, 1/8-in choke, 1480 lbs tubing, 1520 lbs casing pressure; total depth 3698 ft, producing horizon 3653-63 ft, plugged back 3663 ft. **Geological Data:** Domal type structure. **Producing Horizon:** From "big sand" just above top of Discorbis zone. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 7 wells, 3 gas, 4 failures. (During 6 months 1936) none. **Deepest Hole:** Houston Gulf Co.'s Welder 4, abd 6026 ft. **Daily Production Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholders:** Plymouth Oil Co.

BENEDUM & TREES*

Centering Section 19, Welder subdivision, 3½ mi ne Sinton. **Means of Discovery:** Geophysical information and trend drilling with present production. **Extent of Development:** Four deep tests have been drilled and a fifth is active. Benedum & Trees' Mrs. E. H. Welder 1, Section 34, abd 7206 ft, Nov. 29, 1935, having encountered several shows of oil and gas. Welder 2, Section 19, encountered sand 5700-10 ft, not enough pressure to flow; deepened to 6116 ft, finding sand at 6100-16 ft and again finding considerable oil with some salt water and deepened to 7019 ft. Efforts were made to complete in the upper sands, but abd July 12, 1936. Welder 3, located 933 ft sw, drilled to 6140 ft and abd June 24, 1936. Welder 4 is being drilled. Portilla Drilling Co.'s Welder 1, 1 mi sw, abd at 6109 ft. **Principal Leaseholders:** Hiawatha Oil Co. (Benedum & Trees).

*Prospect. †Salt dome, no production. ‡Gas field.

PLYMOUTH

Sections 44, 45, 46, 47, 48, 49, 50, 54, 55, 70, 71 Wilder subdivision, Sections 24, 34, 35 Taft subdivision, 8 mi ne Sinton. **Means of Discovery:** Geological and geophysical work. **Discovery Data:** Plymouth Oil Co.'s E. H. Welder 1-C, Apr. 21, 1936, 265 bbls 32 gravity oil, 3/8-in choke, 225 lbs tubing, 525 lbs casing pressure; total depth 5508 ft, producing horizon 5501-08 ft, elev 55 ft. Heep Oil Corp.'s E. H. Welder 1-E, May 31, 1935, 650 bbls 34.2 gravity oil, 1/4-in choke, 900 lbs tubing, 1250 lbs casing pressure; total depth 5670 ft, producing horizon 5578-5670 ft, elev 54 ft (casing perforated 5659-63 ft). Magnolia Petroleum Co.'s Corpus Christi Bank & Trust Co. 2, Nov. 3, 1935, 590 bbls 38 gravity oil, 1/4-in choke, 900 lbs tubing, 1050 lbs casing pressure; total depth 5911 ft, producing horizon 5907-11 ft. **Geological Data:** Anticlinal structure with several local highs, some faulting, graben cuts lower portion of main field. **Producing Horizon:** All sands in Frio. **Producing Area:** 2120 acres. **Extent of Development:** (to Jan. 1, 1936) 52 wells, 48 oil, 4 failures. (During 6 months 1936) 41 wells, 37 oil, 4 failures. **Deepest Hole:** Sun Oil Co.'s M. K. Edgar 2, abd 7030 ft, Feb. 20, 1936. **Daily Production, Aug 1, 1936:** 9160 bbls. **Rigs Running Aug. 1, 1936:** Ten. **Market Outlets:** Republic Pipe Line Co., Sinton Pipe Line Co. **Reserve Data:** 35,140,000 bbls ultimate from proven area; 623,089 bbls recovered to Jan. 1, 1936; 1,470,402 bbls recovered first 6 months 1936. **Principal Leaseholders:** Plymouth Oil Co., Sun Oil Co., Magnolia Petroleum Co., Humble Oil & Refining Co., Texon Royalty Co.

SINTON

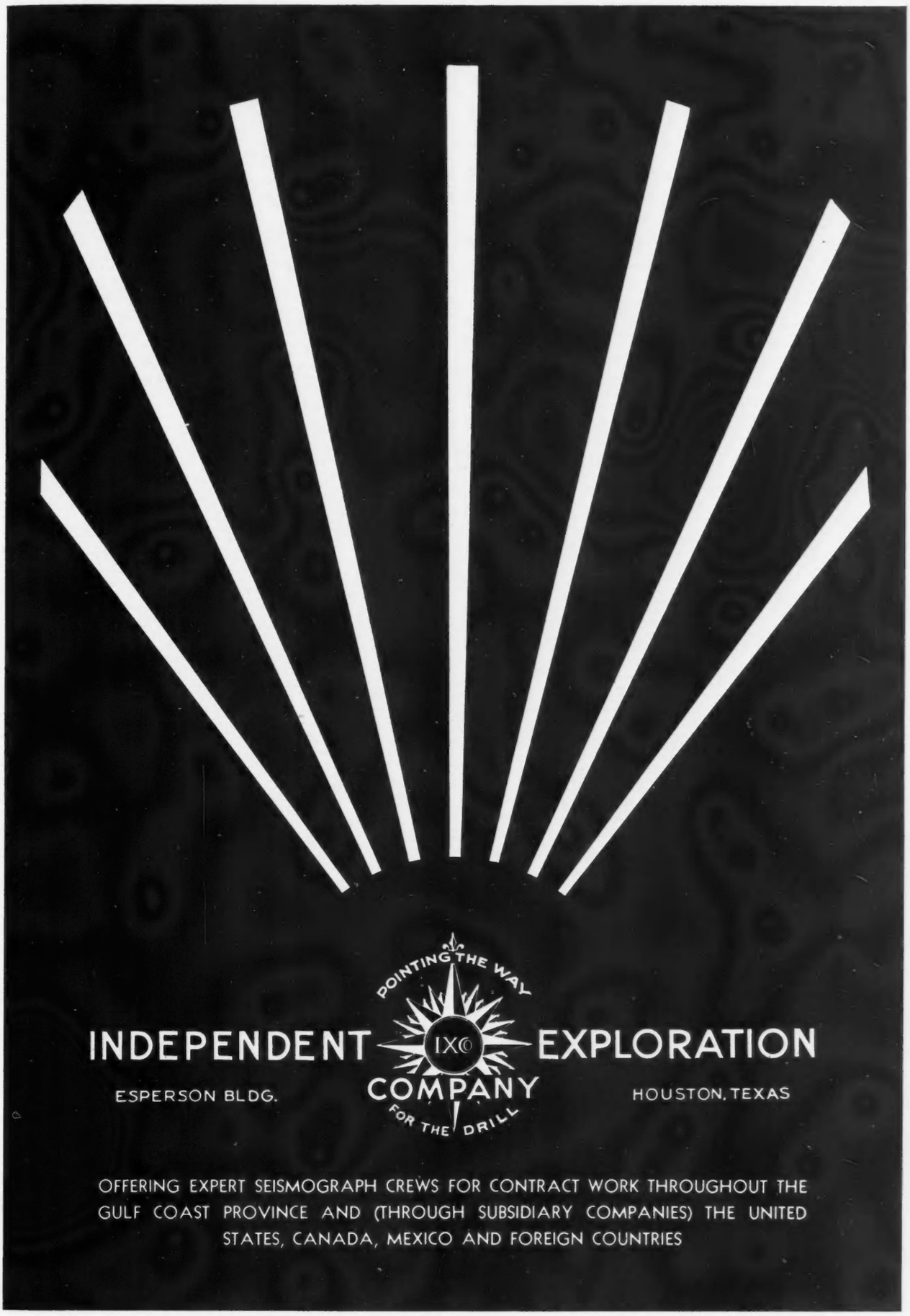
Sections 1, 2, 73, 74, 75 and 80, Welder subdivision, ½-mi n Sinton. **Means of Discovery:** Geological and geophysical information. **Discovery Data:** Plymouth Oil Co.'s E. H. Welder 1-A, May 13, 1934, 100 bbls 48 gravity oil and 25,000,000 cu ft gas, 1/4-in choke; total depth 6602 ft, producing horizon 5415-37 ft, elev 67 ft, 7-in csg 5404 ft, shale 5427-30 ft, sand 5430-34 ft, well plugged back 5100 ft, side tracked, re-drilled to 5434 ft. Heep Oil Corp.'s E. H. Welder 1-A (4), Dec. 16, 1934, 60 bbls 33 gravity oil, 150 bbls sw, 1/4-in choke, 1160 lbs tubing, 1900 lbs casing pressure; total depth 7247 ft, plugged back 5900 ft, perforate 5880-90 ft. Had oil showing 6614-61 ft. **Geological Data:** Sand lensing on anticlinal type structure. **Producing Horizon:** Frio from lower Oligocene. Top Discorbis 3990 ft, Heterostegina 4177 ft. **Producing Area:** 1550 acres, 120 acres oil. **Extent of Development:** (to Jan. 1, 1936) 10 wells, 6 oil, 2 gas, 2 failures. (During 6 months 1936) none. **Deepest Hole:** Heep Oil Corp.'s E. H. Welder 1-A. (See above). **Daily Production Aug. 1, 1936:** 30 bbls. **Rigs Running Aug. 1, 1936:** One. **Market Outlet:** Rail. **Reserve Data:** 600,000 bbls ultimate from proven area; 48,545 bbls recovered to Jan. 1, 1936; 2816 bbls recovered first 6 months 1936. **Principal Leaseholders:** Plymouth Oil Co., Petrol Drilling Co., Heep Oil Co., Sun Oil Co. **Remarks:** Well showed high gas/oil ratio, accounting for low ultimate recovery figure—future wells may reduce gas/oil ratio and recover much greater amount of oil.

TAFT

Sections 23, 6, 1, Third Taft Farm Subdivision, William Burns, J. N. W. Ottman and Joseph Fesseben Surveys, 3 mi n Taft. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Geo. E. Smith et al's J. L. Britton 1, Dec. 17, 1935, 425 bbls oil, 1/8- and 1/4-in choke, 450 lbs tubing, 650 lbs casing pressure; total depth 4901 ft, producing horizon 4872-01 ft, elev 52 ft, set 7-in csg 4879 ft. Humble Oil & Refining Co.'s J. W. Mayo 1, Mar. 10, 1936, 840 bbls oil, 3/8-in choke, 420 lbs tubing, 440 lbs casing pressure; total depth 3975 ft, producing horizon 3968-75 ft, elev 54 ft derrick floor, 7-in csg 3969 ft. **Geological Data:** Sand lens against faulting. **Producing Horizon:** 3900-ft sand in Catahoula—4900 sand corresponds to Greta in Heterostegina. **Producing Area:** 240 acres. **Extent of Development:** (to Jan. 1, 1936) 1 oil well. (During 6 months 1936) 11 wells, 9 oil, 2 failures. **Deepest Hole:** Humble Oil & Refining Co.'s J. W. Godwin 1; total depth 6352 ft, plugged back, sidetracked and re-drilled 4005 ft, completed 190 bbls oil, 9/64-in choke, tubing pressure 400 lbs, May 2, 1936. **Daily Production Aug. 1, 1936:** 985 bbls. **Rigs Running Sept. 1, 1936:** Four. **Market Outlets:** Republic Pipe Line Co., Sinton Pipe Line Co. **Reserve Data:** 3,600,000 bbls ultimate from proven area; 4716 bbls recovered to Jan. 1, 1936; 52,328 bbls recovered first 6 months 1936. **Principal Leaseholders:** Shell Petroleum Corp., Humble Oil & Refining Co., Ennes Oil Co., Taft Production Co., Cage Production Co., Heep Oil Corp., O. W. Killam, Stanolind Oil & Gas Co.

WHITE POINT

John Gravis, S. S. Gillette, John M. Segine, William Bell, M. M. Flores Surveys, Roos subdivision, 9 mi n Corpus Christi. **Means of Discovery:** Surface indications and geological information. **Discovery Data:** Prior to 1920 a number of tests were drilled, blowing out and making tremendous flows of gas, finally cratering and in several instances burning. Several tests flowed at rates estimated up to 150,000,000 cu ft gas per day. Sands between 1900 and 2800 ft finally developed after tremendous pressure overcome. **Subsequent Discoveries:** Saxet Oil Co.'s Rachel 17; Nov. 27, 1930, 20,000,000 cu ft gas and 100 bbls 23.4 gravity oil, total depth 4902 ft, sand 4878-4902 ft, deepened to 6000 ft, but plugged back to same level and re-completed. Rock pressure 2100 lbs. **Geological Data:** Elongated anticline with axis running in northeast to southwest direction and has a closure of approximately 60 ft on west and northwest sides. **Producing Horizon:** Upper gas sands from Miocene series, oil from Marine Oligocene, topped at 4232 ft. **Producing Area:** 2950 acres, 40 acres oil. **Extent of Development:** (to Jan. 1, 1936) 73 wells, 3 oil, 49 gas, 21 failures; (During 6 months 1936) None. **Deepest Hole:** Saxet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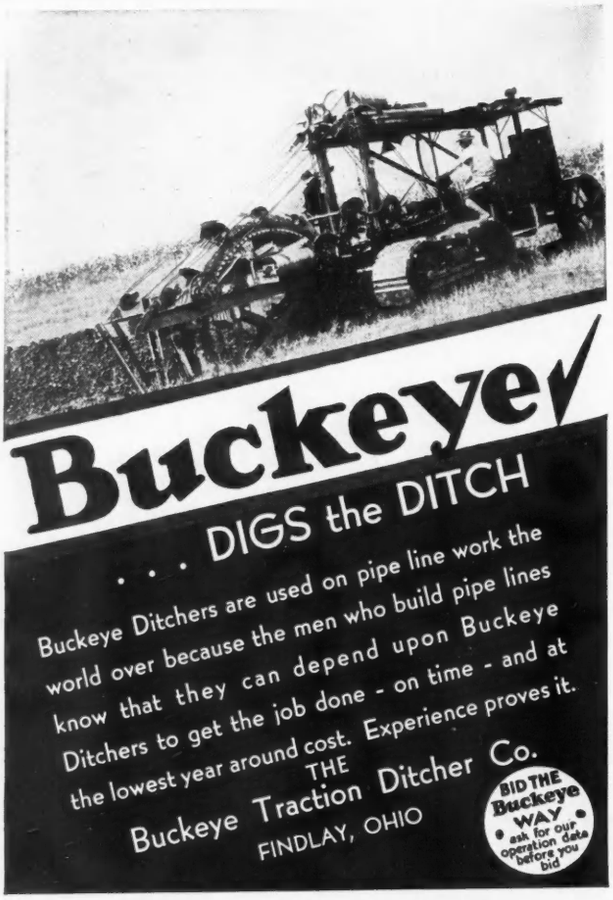
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Oil Co.'s Rachel 19, total depth 7205 ft, plugged back and completed as shallow gasser May 25, 1933. **Daily Production, Aug. 1, 1936:** None. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlets:** United Gas System. **Reserve Data:** 77,990 barrels ultimate from proven area. 73,040 bbls recovered to Jan. 1, 1936. 4950 bbls recovered first 6 months 1936. **Principal Leaseholders:** Saxet Oil Co., Houston Oil Co., Whitepoint Oil & Gas Co., Sun Oil Co., Stanolind Oil & Gas Co., United Production Co.

STARR COUNTY

ARROYO GRANDE*

Centering around n end of Porcions 69, 70, 71 and 72 and several sections immediately north, 12 mi n Roma. **Means of Discovery:** Surface indications; oyster escarpment is exposed. **Extent of Development:** About 20 wells, shallow and deep, have been drilled in the immediate area. Some oil and gas shows were encountered at shallow depths. Empire Gas & Fuel Co.'s Paza 1, 1924, encountered sand at 3208-15 ft, 500,000 cu ft gas spraying a little oil. Four shallow gassers in the 400-ft sand have been completed. Great Plains Oil Co.'s Sanchez 1, in process of drilling for several years by several owners, abd Jan., 1935, in oil sand 3659-86 ft. Ash & Tackett's R. E. Margo 1, Block 4, Share 3-V, Portion 70, showed for about 2 bbls of 22 gravity oil, 40 lbs shut-in pressure at 372-76 ft, Nov. 14, 1935. Several other shallow tests were drilled in the vicinity of the Margo test. Two tests to the deeper horizons were drilled during 1935, both by Sunray Oil Co. Munoz abd 4008 ft, Sanchez 1 abd 4015 ft.

BARBACOAS

Porciones 86, 87, 88 and 89, 8 mi ne Rio Grande City. **Means of Discovery:** Geophysical Survey. **Discovery Data:** Jeffries Lambeth Drilling Co.'s Starr Cattle Co. 1, May 4, 1933, 20,000,000 cu ft gas, 2455 ft; producing horizon 2450-55 ft. Goodwin & Yantis' Kelsey Bass 3, Jan., 1934, 2,000,000 cu ft dry gas, total depth 1040 ft, producing horizon 690-700 ft; plugged back to 700 ft. Marren, Johnson & Jeffries' Starr County Cattle Co. 2, Mar. 25, 1934, 120 bbls oil, total depth 2518 ft, producing horizon 2505-18 ft. Marren, Johnson & Bond's Starr County Cattle Co. 4, Apr. 13, 1935, 18,000,000 cu ft gas, 1000 lbs rock pressure, total depth 4213 ft, sidetrack and redrill to 2811, perforated 2704-12 ft. **Geological Data:** Domal type structure with sand lenses, indications of some faulting. **Producing Horizon:** Shallow gas sand from Catahoula; lower gas and oil sand, from Frio. **Producing Area:** 300 acres, 20 acres oil. **Extent of Development:** (to Jan. 1, 1936) 30 wells, 2 oil, 9 gas, 19 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Larkin & Warr's Kelsey Bass 1, in Yegua, showed gas 5282-5342 ft, abd 5453 ft, July 1, 1936. **Daily Production, Aug. 1, 1936:** 12 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Trucks; gas line to Rio Grande City. **Reserve Data:** 70,000 bbls ultimate from proven area; 18,572 bbls recovered to Jan. 1, 1936; 2499 bbls recovered first 6 months 1936. **Principal Leaseholders:** Larkins & Warr, Merren, Johnson & Bond, Weekly Oil Co., Goodwin & Yantis.

CARRUTH*

Share 1-B, Porcicnes 91, 92, 2 mi e Barbacoas field. **Means of Discovery:** Geological information. **Extent of Development:** Lester & Duffield, Inc., and R. H. Vice et al drilled E. B. Carruth 1, Mar. 20, 1935, 3,000,000 cu ft gas, 2 bbls of oil. It was carried to 4016 ft, plugged back, sidetracked and drilled to 2908 ft, cementing 7-in casing at 2895 ft, sand 2882-95 ft, oil sand 2895-2908 ft.

CUEVITAS

Porcions 110 and 111, Sacatosa and Cuevitas grants, n portion of county. **Means of Discovery:** Geological information, correlation of several wells, and surface indications. **Discovery Data:** Sun Oil Co.'s Guerra 1-A, June 13, 1933, 17,000,000 cu ft gas and several bbls 34.8 gravity oil, ⅝-in choke, sand 2209-19 ft, deepened to 2232 ft in sand and recompleted 385 bbls oil and 3,500,000 cu ft gas; 6⅝-in casing set 2208 ft; Guerra 6-B, May 3, 1934, 100 bbls, 400 lbs pressure, total depth 2055 ft, producing horizon 2047-55 ft, 7-in casing 2045 ft. **Geological Data:** Sand lensing structure with sand body ranging to 35 and 40 ft. **Producing Horizon:** From Mirando series of McElroy or Hockleyensis member of Middle Jackson about same position as Government Wells sand. **Producing Area:** 650 acres, 450 oil. **Extent of Development:** (to Jan. 1, 1936) 32 wells, 9 oil, 6 gas, 17 failures. (During 6 months 1935) 2 wells, 1 oil, 1 failure. **Deepest Hole:** Sun Oil Co.'s Guerra, dry and abd 3600 ft in Cockfield. **Daily Production, Aug. 1, 1936:** 412 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Sun Oil Co. has 120,000-bbl tank on lease and ships oil by rail. **Reserve Data:** 2,450,000 bbls ultimate from proven area; 229,685 bbls recovered to Jan. 1, 1936; 74,193 bbls recovered first 6 months 1936. **Principal Leaseholder:** Sun Oil Co. has solid block in vicinity of field.

LOS OLMOS

Sections 5, 6, 7 and 8 of Porcions 75, 76 and 77. **Means of Discovery:** Geological information, surface indications. **Discovery Data:** Mercedes Oil & Gas Co.'s A. K. Bass 3, July 10, 1925, 2,000,000 cu ft gas, 540 ft, top sand 528 ft; elev 226 ft. Los Olmos Oil & Gas Co.'s A. K. Bass 1, Oct. 30, 1930, 4,500,000 cu ft gas spraying small quantity 18.5 gravity oil, rock pressure 120 lbs, total depth 388 ft, producing horizon 371-88 ft. Los Olmos Oil & Gas Co.'s Kelsey Bass 57, Feb. 6, 1934, 2,000,000 cu ft gas, total depth 694 ft; producing horizon 692-94 ft, 4-in casing 690 ft. **Geological Data:** Series of sand lenses rather than blanket sand, some faulting indicated. **Producing Horizon:** Frio. **Producing Area:** 350 acres, 175 acres oil. **Extent of Development:** (to Jan. 1, 1936) 149 wells, 76 oil, 12 gas, 61 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Producers Oil Co.'s Kelsey Bass 1, abd 2612 ft, Oct. 1, 1911, sand 2040-2129 ft. **Daily Production,**

*Prospect. †Salt dome, no production. ‡Gas field.

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T-I-W LINER PULLERS
T-I-W VALVE SEAT PULLERS
T-I-W FISHING TOOLS
T-I-W LINER SETTING TOOLS
T-I-W CASING ACCESSORIES
T-I-W MILLING TOOLS OF ALL KINDS
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TEXAS IRON WORKS

1401-1423 MAURY ST. **HOUSTON, TEXAS**

Aug. 1, 1936: 180 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Pipe line to Rio Grande City. **Reserve Data:** 700,000 bbls ultimate from proven area; 419,321 bbls recovered to Jan. 1, 1936; 30,510 bbls recovered first 6 months 1936. **Principal Leaseholders:** St. Marys Oil & Gas Co., Rio Oil & Gas Co., Walter E. Hopper, K. Garrison, J. P. Kennedy, Ed. Lindberg.

PLACETA (WOODS)‡

South ends of Porcions 83 and 84, 3 mi se Rio Grande City. **Means of Discovery:** Geological data. **Discovery Data:** A. J. Weyel Tr.'s Wardner 1, blew out Jan. 15, 1936, at 2051 ft, ran wild for several weeks, blowing gas and salt water, later abd. E. Leach's Dona 1, July 22, 1936, 5,000,000 cu ft gas, 400 lbs pressure, total depth 1028 ft, producing horizon 963-75 ft, 5 3/16-in casing 1028 ft, perforated 963-75 ft. **Geological Data:** Anticlinal structure, possibly nw-se strike. **Producing Horizon:** Frio. **Producing Area:** 40 acres. **Extent of Development:** (to Jan. 1, 1936) 1 failure. (During 6 months 1936) 4 wells, 1 gas 3 failures. **Deepest Hole:** Hughston Oil Co.'s Wood-Gregg 1, abd 3360 ft, June 17, 1935. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** 1. **Principal Leaseholders:** A. J. Weyel, Trustee, Ed. Leach, Hughston Oil Co., Killam & Staggs.

RIO GRANDE CITY

Porcions 80 and 81, ne Rio Grande City. **Means of Discovery:** Geological information, surface indications as result of escarpment. **Discovery Data:** Sioux Oil Corp.'s Wood et al (Heard & Heard) 1, May 31, 1932, 75 bbls 27.3 gravity oil, 1380 ft, producing horizon 1375-80 ft, elev 178 ft. **Geological Data:** Faulting and sand lensing narrow, spotted producing section. **Producing Horizon:** Jackson. **Producing Area:** 140 acres. **Extent of Development:** (to Jan. 1, 1936) 54 wells, 20 oil, 34 failures. (During 6 months 1936) 11 wells, 6 oil, 5 failures. **Deepest Hole:** Hiriam Reed's Chatfield 1-A, abd 3258 ft, Sept. 5, 1935. **Daily Production, Aug. 1, 1936:** 295 bbls. **Rigs Running, Aug. 1, 1936:** 2. **Market Outlet:** Trucks and rail. **Reserve Data:** 560,000 bbls ultimate from proven area; 146,337 bbls recovered to Jan. 1, 1936; 42,666 bbls recovered first 6 months 1936. **Principal Leaseholders:** M. P. Evans, Goodwin & Zimmerman, R. G. Hall, Hiriam Reed, Sioux Oil Co., John H. Clopton, Fech Oil Co., Moss & Bass.

ROMA

Porcions 67, 68, 69, 70, 71 and 72, extends n from Roma and s from same point into Mexico. **Means of Discovery:** Surface geology by The Texas Co., Shell Petroleum Corp., and Husteca Petroleum Corp., also information based on shallow wells. **Discovery Data:** M. Guerra's Fee 1, Oct. 28, 1927, 1,500,000 cu ft gas, total depth 200 ft, producing horizon 192-200 ft; elev 286 ft. The Texas Co.'s D. Guerra 4-A, Dec. 17, 1929, 50 bbls 35 gravity oil, total depth 3590 ft, producing horizon 3560-66 ft, 6⅝-in csg 3650 ft. **Geological Data:** Anticlinal structure, extending nw-se with axis of structure running nw from a point about ½ mi west of Roma. Top of structure 3 mi nw Roma. **Producing Horizon:** Shallow gas from near contact of Frio and Jackson, oil production in Queen City section. **Producing Area:** 300 acres, 20 acres oil. **Extent of Development:** (to Jan. 1, 1936) 14 wells, 1 oil, 4 gas, 9 failures. (During 6 months 1936) 4 failures. **Deepest Hole:** The Texas Co.'s M. Guerra & Son 1, abd 4827 ft, sands 256-60; 3374-3519 ft; 3589-3610 ft; 4742-93 ft; elev 284 ft. **Daily Production, Aug. 1, 1936:** 3 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Reserve Data:** 20,000 bbls ultimate from proven area; 8327 bbls recovered to Jan. 1, 1936; 643 bbls recovered first 6 months 1936. **Market Outlet:** Trucks. **Principal Leaseholder:** The Texas Co.

SANTO DOMINGO‡

Porcion 92, 6 mi w Samfordyce field, 1 mi n Rio Grande. **Means of Discovery:** Geological information. **Discovery Data:** John Clopton et al's Roos & Bennett 3, Jan. 26, 1936, 15,000,000 cu ft gas, 1050 lbs tubing, 1100 lbs casing pressure; total depth 4003 ft, producing horizon 2461-2616 ft, elev 152 derrick floor; plugged back and set 5-in casing 2630 ft, perforated 2415-17 ft. **Geological Data:** Anticlinal type structure. **Producing Horizon:** Frio. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 failure. (During 6 months 1936) 2 wells, 1 oil, 1 failure. **Deepest Hole:** Discovery. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Shut in. **Reserve Data:** Gas field. **Principal Leaseholders:** John Clopton, Porter et al.

TRAVIS COUNTY

KIMBRO

Kimbro and T. Smith Surveys. **Means of Discovery:** Geological information. **Discovery Data:** W. F. Billingslea et al's Lungsin 1, Sept. 7, 1935, 40 bbls oil, total depth 670 ft, producing horizon 660-70 ft. **Geological Data:** Igneous plug. **Producing Horizon:** Serpentine. **Producing Area:** 10 acres. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 2 oil, 7 failures. (During 6 months 1936) 3 failures. **Deepest Hole:** W. Albrecht and F. Brinkrueder's M. C. Swenson 1, abd 1280 ft in Edwards lime, Apr. 20, 1936. **Daily Production, Aug. 1, 1936:** Included in Manda. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Trucks. **Reserve Data:** Included in Manda. **Principal Leaseholder:** W. F. Billingslea.

MANDA

J. B. Kemper Survey, eastern part of county. **Means of Discovery:** Geophysical prospect checked by magnetometer. **Discovery Data:** Humble Oil & Refining Co.'s C. J. Peterson 1, Oct. 4, 1934, 10 bbls oil, total depth 740 ft, top serpentine 631 ft, oil show 666-78 ft, 6⅝-in casing 664 ft. **Geological Data:** Igneous plug. **Producing Horizon:** Serpentine. **Producing Area:** 30 acres. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 4 oil, 5 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Walden Oil Co.'s P. C. Willis 1, abd 1050 ft, Mar. 10, 1936. **Daily Production, Aug. 1, 1936:** 21 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Humble Oil & Refining Co. to loading rack. **Reserve Data:** 80,000 bbls ultimate from proven area; 11,022 bbls recovered to Jan. 1, 1936; 4285 bbls recovered first 6 months 1936. **Principal Leaseholder:** Humble Oil & Refining Co. **Remarks:** Included in Kimbro.

SERPENTINE*

Well scattered through southeast side of county, see map. **Means of Discovery:** Mainly on magnetometer surveys. **Extent of Development:** Not less than 15 wildcats have been drilled on magnetometer structures during the past three years, the majority finding serpentine, but in many cases, hard and dry. These prospects are not being treated individually due to their similarity. The usual method of hunting these plugs is to work the area with magnetometer and drill on the flank of the structure. Several holes may be required to find the soft, porous, saturated section of the plug. **Principal Leaseholders:** The majority of the leaseholders are independents, although some acreage is held by major companies.

VICTORIA COUNTY

BLOOMINGTON*

Includes C. Creamer and Kemper Survey, e of Guadalupe River and between the river and Black Bayou, n of Calhoun County line, and ne McFaddin field. **Means of Discovery:** Torsion balance work by Getty Geophysical Engineering Corp. Block rechecked by Humble Oil & Refining Co. in 1932 when block of 4500 acres taken from Petty. **Extent of Development:** Humble Oil & Refining Co.'s Peter Rydolph, Kemper Survey, abd 6962 ft, Nov. 1, 1932; sand 3185-95 ft, developed 1250 lbs pressure on 3-min drill-stem test, flow 40,000,000 cu ft, 5200 ft drill-stem test sprayed oil, 5232-43 ft salty water and mud; 6505-12 ft salt water, little gas and rainbow of oil, 4 min on ⅜-in choke. Production in this well found at same level as in the Slick-Seeligson Corp. well to the west and in the McFaddin field, leading to the belief that this prospect is in reality a portion of the big McFaddin field.

COLETTO CREEK

R. Manchola grant, 6 mi sw Victoria. **Means of Discovery:** Surface geology. **Discovery Data:** Stoneleigh Oil & Gas Co.'s Etta B. Terrell 1, June 10, 1933, 168 bbls 37.8 gravity oil, 7/32-in choke; 1735 lbs casing pressure; total depth 4437 ft, producing horizon 4423-37 ft, elev 65 ft, 20,000,000 cu ft gas and 168 bbls 37.8 gravity oil. Houston Oil Co.'s V. A. Urban (Shell) 1, 10,000,000 cu ft gas, ¾-in choke; 700 lbs tubing, 1000 lbs casing pressure; total depth 2174 ft, producing horizon 2167-74 ft. Petrol Corp.'s Machalec 1, June 24, 1934, 125 bbls 24 gravity oil, total depth 2885 ft, producing horizon 2835-41 ft, pb 2841 ft, 7-in csg 2828 ft. Nutex Oil Co.'s Zimmer 1, Aug. 7, 1934, 100 bbls 19.5 gravity oil; 880 lbs tubing, 765 lbs csg pressure; total depth 2209 ft, producing horizon 2204-09 ft; also produced 1,500,000 cu ft gas. **Geological Data:** Anticlinal structure. **Producing Horizon:** Catahoula and Frio. **Producing Area:** 480 acres, 280 oil. **Extent of Development:** (to Jan. 1, 1936) 34 wells, 20 oil, 4 gas, 10 failures. (During 6 months 1936) 7 wells, 3 oil, 4 failures. **Deepest Hole:** Albert Plummer's Zimmer 1, abd 5371 ft, Oct., 1934. **Daily Production, Aug. 1, 1936:** 745 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Leo Glover Pipe Line Co. has loading rack. **Reserve Data:** 2,296,000 bbls ultimate from proven area; 214,254 bbls recovered to Jan. 1, 1936; 139,221 bbls recovered first 6 months 1936. **Principal Leaseholders:** American Liberty Oil Co., Bay Oil & Gas Co., Benson Drilling Co., Nutex Oil Co., Petrol Oil., Plummer Oil Corp., Cox & Hamon, Trans-State Development Co.

HUGHES

F. Dimmitt Grant, 2½ mi se Victoria. **Means of Discovery:** Magnetometer and geological survey. **Discovery Data:** Portilla Drilling Co.'s P. H. Welder 1, Aug. 16, 1936, 20,000,000 cu ft gas, 4279 ft, 1500 lbs rock pressure, producing horizon 4276-79 ft. **Geological Data:** Domal type structure. **Producing Horizon:** Top of Frio. **Extent of Development:** (to Jan. 1, 1936) 1 failure (During 6 months 1936), None. **Deepest Hole:** Welder Oil & Gas Co.'s P. H. Welder 1, abd 6015 ft, Dec. 8, 1935. It had show 150 lbs. pressure, 180 ft of mud cut with gasoline and 800 ft of salt water at 5065 ft. **Rigs Running, Aug. 1, 1936:** One. **Principal Leaseholder:** Portilla Drilling Co. **Remarks:** Portilla Drilling Co.'s Welder 2, Sept. 9, 1936, 125 bbls 43 gravity oil, 1/8-in choke, total depth 4820 ft, sand 4812-20 ft, opens new producing horizon in Frio.

KEERAN

Martin de Leon Survey, 15 mi se Victoria. **Means of Discovery:** Geological and geophysical information; torsion balance and seismograph. **Discovery Data:** CR&M Drilling Co. and C. B. Bunte et al's Keeran 1, Jan. 31, 1932, 50,000,000 cu ft gas, 30 bbls gasoline, ¼-in choke, 2250 lbs working pressure; total depth 5191 ft, producing horizon 5181-91 ft; Keeran 2, Aug. 11, 1932, 520 bbls oil, 501 lbs tubing, 1000 lbs casing pressure; total depth 5841 ft, producing horizon 5831-41 ft. Union Oil Co.'s Keeran 2, Feb. 23, 1933, 120,000,000 cu ft gas and 240 bbls 56 gravity gasoline, 1¾-in choke; 1500 lbs tubing, 2250 lbs casing pressure; total depth 6609 ft, producing horizon 5493-5507 ft. Gulf Production Co.'s Keeran 3, Apr. 1, 1933, 680 bbls 37 gravity oil, 5/16-in choke, 1450 lbs tubing, 1750 lbs casing pressure; total depth 7465 ft, plugged back, sidetracked and drilled to sand 5701-05 ft. **Geological Data:** Domal type structure. **Producing Horizon:** Frio. **Producing Area:** 650 acres, 200 acres oil. **Extent of Development:** (to Jan. 1, 1936) 12 wells, 4 oil, 3 gas, 5 failures. (During 6 months 1936) 1 oil well. **Deepest Hole:** Humble Oil & Refining Co.'s J. Mitchell 2, abd 7715 ft, in top of Vicksburg, Sept. 16, 1934. **Daily Production, Aug. 1, 1936:** 322 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Gulf Pipe Line Co. **Reserve Data:** 2,000,000 bbls ultimate from proven area; 348,627 bbls recovered to Jan. 1, 1936; 54,064

*Prospect. †Salt dome, no production. ‡Gas field.

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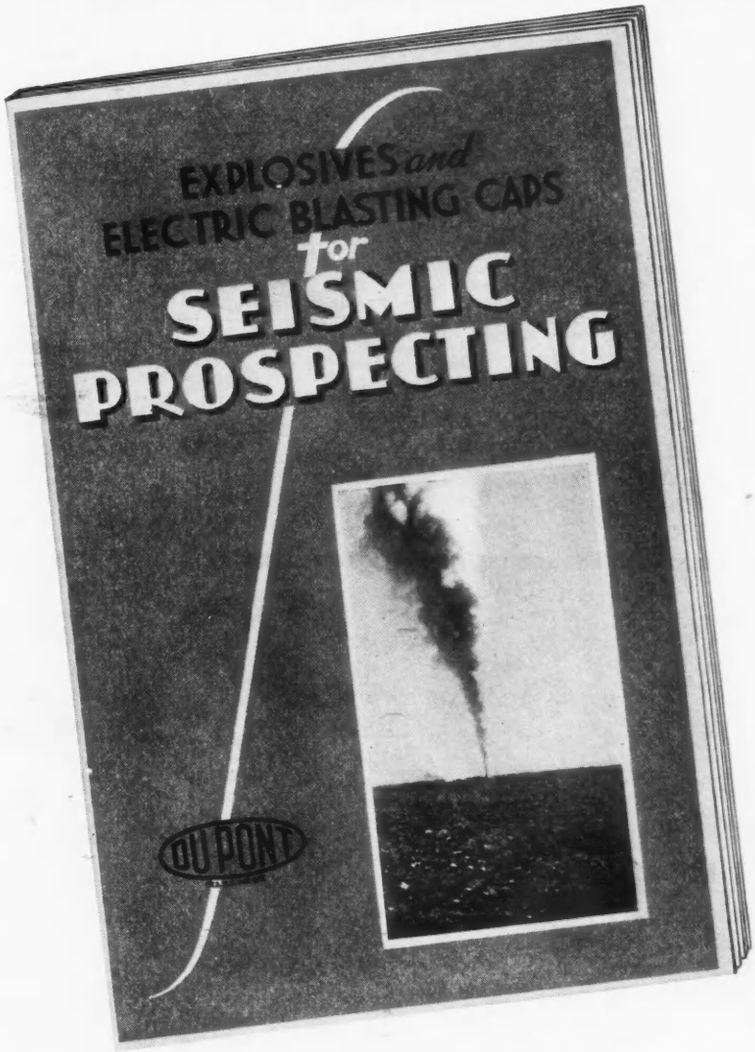

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bbls recovered first 6 months 1936. **Principal Leaseholders:** Humble Oil & Refining Co., Gulf Oil Corp. et al, Union Oil Co.

KEMPER‡ (Warden)

Edward McDonough league, 12 mi s Victoria. **Means of Discovery:** Geophysics. **Discovery Data:** The Texas Co. et al's J. J. Warden 1, 3,000,000 cu ft gas, ¼-in choke, 1800 lbs tubing, 1840 lbs casing pressure, 5629 ft, producing horizon 4488-96 ft, elev 110 ft, plugged back and redrilled to 4496 ft. **Geological Data:** No information as yet. **Producing Horizon:** Probably in Marginulina. **Producing Area:** 20 acres. **Extent of Development:** (to Jan. 1, 1936) 1 gas well. (During 6 months 1936) None. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Shut in. **Reserve Data:** Gas. **Principal Leaseholders:** The Texas Co., The California Co., Shell Petroleum Corp.

McFADDIN

Including portions of Maria Josefa Traviesa, J. Varin, C. O. Edwards, Foster Lewers, Field Jones, C. M. B. Hoyd, John Rine and adjoining surveys. In extreme southern end of county. **Means of Discovery:** Geological subsurface work and shallow water wells. **Discovery Data:** Lion Oil & Refining Co.'s A. M. McFaddin 1, June 21, 1930, 40,000,000 cu ft gas, ⅜-in choke; 1750 lbs casing pressure; total depth 3749 ft, elev 36 ft, sand 3742-49 ft. The Texas Co.'s A. M. McFaddin 2, Feb. 15, 1931, 30,000,000 cu ft gas, sand 2005-25 ft; A. M. McFaddin 3, Jan. 1, 1932, 750 bbls oil, total depth 5832 ft, sand 5828-32 ft, went dead and deepened to 7025 ft and abd. Slick-Seeligson, Inc.'s McFaddin 1, 1932, 40,000,000 cu ft gas, spraying little oil, total depth 4696 ft, sand 4685-96 ft, drilled deeper to 6770 ft, plugged back to 5180 ft, completed as gasser (well definitely established two producing horizons). The Texas Co.'s A. M. McFaddin 2, old well deepened from 2025 to 6420 ft, plugged back and perforated casing 6197-86 ft, Nov. 17, 1934, 288 bbls 47 gravity oil, 3/16-in choke, tubing pressure 750 lbs, casing pressure 1525 lbs. Shell Petroleum Corp.'s A. M. McFaddin 1, Apr. 18, 1935, 50,000,000 cu ft gas, tubing pressure 900 lbs, casing pressure 1050 lbs, sand 3496-3512 ft. Houston Oil Co.'s Fagan 1, June 14, 1935, 12,000,000 cu ft dry gas, ¼-in choke, tubing pressure 800 lbs, casing 900 lbs, sand 2222-32 ft. The Texas Co.'s A. M. McFaddin 9, July 18, 1935, drilled to 6271 ft, plugged back and perforated 2440-60 ft, 5,000,000 cu ft gas, ¼-in choke, working pressure 400 lbs, elev 82 ft. **Geological Data:** Large anticlinal type structure, possibly several local saddles and sand lenses from which oil and gas will be developed. Larger gas sands (mainly 3700-ft) are generally a blanket affair. **Producing Horizon:** Catahoula producing gas and Frio producing oil. **Producing Area:** 12,000 acres, 30 acres oil. **Extent of Development:** (to Jan. 1, 1936) 30 wells, 2 oil, 11 gas, 17 failures. (During 6 months, 1936) None. **Deepest Hole:** The Texas Co.'s A. M. McFaddin 3 (see above). **Daily Production, Aug. 1, 1936:** 12 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Reserve Data:** 165,000 bbls ultimate from proven area; 88,334 bbls recovered to Jan. 1, 1936; 4186 bbls recovered first 6 months 1936. **Principal Leaseholders:** Lion Oil Refining Co., United Production Co., Houston Oil Co., The Texas Co., Shell Petroleum Corp., Slick Urschel Corp., Humble Oil & Refining Co.

*Prospect. †Salt dome, no production. ‡Gas field.

NURSERY*

S. de Leon, A. A. & M. G. Railroad, I R R Railroad surveys, north of Nursery. **Means of Discovery:** Geological and geophysical information. **Extent of Development:** Quintana Petroleum Co.'s S. W. McCormick 1, abd Mar. 29, 1933, 7400 ft, about 150 ft in Cockfield, 1500 lbs pressure from a section of sand and shale at 5330-6030 ft. Humble Oil & Refining Co. had previously drilled J. Welder 3-A to 5896 ft; 12 wells on the block, 5 shallow gas wells around 900 ft.

PLACEDO

Nancy Dean, Wm. Rupley, E. Benevides, S.A.&M.G. Railway, J. Brownson, A. Murray surveys, at Placedo. **Means of Discovery:** Geophysical prospect; trend play. **Discovery Data:** L. A. Gillispie et al's Henderson & Pickering 1, April 13, 1935, 341 bbls 35 gravity oil, 3/16-in choke, 1700 lbs tubing, 2300 lbs casing pressure, total depth 6018 ft, producing horizon 6005-18 ft, 7-in casing 6001 ft, elev 56 ft derrick floor. Gillispie & Superior's J. Janis 1, July 1, 1935, 360 bbls 23.5 gravity oil, ¼-in choke; 275 lbs tubing, 750 lbs casing pressure; after plugging from 4756 to 4747 ft producing horizon 4737-47 ft; 7-in casing 4737 ft. Martex Oil Co.'s J. Mitchell 1, total depth 5337 ft, producing horizon 5293-5337 ft, 7-in casing 5337 ft made gasser spraying oil July 16, 1935, drilled deeper to 6050 ft and recompleted April 22, 1936, through perforations 5322-28 ft as gasser spraying distillate, tubing pressure 700 lbs, casing 1200 lbs. **Geological Data:** Anticlinal structure with some sand lenses. **Producing Horizon:** 4700-ft sand in Heterostegina, deeper sands in Frio. **Producing Area:** 1750 acres; 1450 acres oil. **Extent of Development:** (to Jan. 1, 1936) 31 wells, 24 oil, 2 gas, 5 failures. (During 6 months 1936) 45 wells, 42 oil, 1 gas, 2 failures. **Deepest Hole:** Costa Oil Co. and Eastern Texas Petroleum Co.'s Kruppa 1-B, 6468 ft; plugged back and completed in gas sand 6341-46 ft, March 5, 1936. **Daily Production, Aug. 1, 1936:** 3942 bbls. **Rigs Running, Aug. 1, 1936:** 9. **Market Outlets:** Barnsdall Pipe Line Co. to refinery at Port Lavaca; several loading racks to railroads crossing field. **Reserve Data:** 20,300,000 bbls ultimate from proven area; 171,971 bbls recovered to Jan. 1, 1936; 446,137 bbls recovered first 6 months 1936. **Principal Leaseholders:** American Liberty Oil Co., Barnsdall Oil Co., Felmont Oil Corp., Crown Central Petroleum Corp., Eastern Texas Oil Co., Costa Oil Co., Magnolia Petroleum Co., Sun Oil Co., Superior Oil Co., E. L. Smith Oil Co., Gulf Oil Corp., Westgate Oil Co.

TELFERNER*

Centering around T.&N.O. Survey No. 1, 4 mi n Telferner. **Means of Discovery:** Surface evidence. It was also checked by geo-

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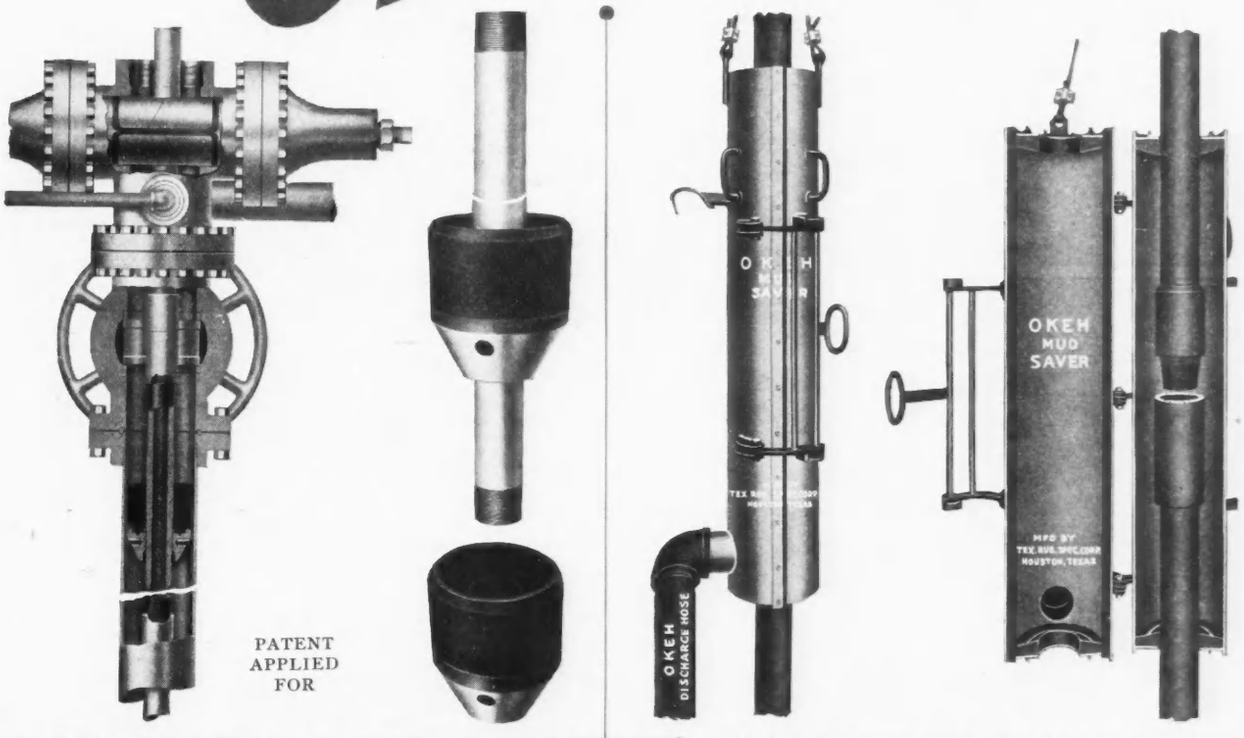

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physical instruments, including torsion balance by Humble Oil & Refining Co. Probable salt dome. **Extent of Development:** Several wells drilled, but heaving shale prevented reaching desired depths in several deep tests. Houston Oil Co.'s Conrad went to below 5270 ft; McFaddin 1-A, to 6480 ft; Beck 1, 5508 ft, all being abd. They did pick up some sands, but did not report anything interesting.

WEBB COUNTY

ALBERCAS

Albercas grant, se part county. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Simms Oil Co.'s A. M. Bruni 1, Mar. 16, 1927, 50,000,000 cu ft gas, spray 21 gravity oil, 2158 ft, sand 2141-58 ft, 6⅝-in 2155 ft, 600 lbs rock pressure, elev 837 ft. **Geological Data:** Sand lens on fold. **Producing Horizon:** Lower Cole section of Upper Jackson series. **Producing Area:** 450 acres, 246 acres oil. **Extent of Development:** (to Jan. 1, 1936) 113 wells, 88 oil, 12 gas, 13 failures, none during 6 months 1936. **Deepest Hole:** O. W. Killam's A. M. Bruni 1, Block 55, Albercas grant, abd 3710 ft, Jan. 27, 1935. **Daily Production, Aug. 1, 1936:** 100 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Humble Pipe Line, Texapala Pipe Line Co. **Reserve Data:** 2,880,000 bbls ultimate from proven area; 2,407,721 bbls recovered to Jan. 1, 1936; 17,692 bbls recovered first 6 months 1936. **Principal Leaseholders:** O. W. Killam, Magnolia Petroleum Co., Sun Oil Co., South Texas Production Co., Houston Oil Co.

AVIATOR

Sections 53, 58, 54, Los Ojuelos grant, 4 mi s Mirando City. **Means of Discovery:** Trend play, geological information. **Discovery Data:** Aviator Oil Co.'s Puig Bros. 1, May 28, 1922, 25,000,000 cu ft gas spraying 21 gravity oil, total depth 1586 ft, sand 1578-86 ft, elev 865 ft. **Geological Data:** Sand lensing structure, faulting at north end of structure. **Producing Horizon:** Mirando section of McElroy zone, Jackson age. **Producing Area:** 1280 acres, 960 acres oil. **Extent of Development:** (to Jan. 1, 1936) 285 wells, 197 oil, 18 gas, 20 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** Simms Oil Co.'s A. M. Bruni 1, 3975 ft, completed as gasser in regular sand. **Daily Production, Aug. 1, 1936:** 420 bbls. **Rigs Running:** None. **Market Outlets:** Crown Central Petroleum Corp., Texapata Pipe Line Co. **Reserve Data:** 6,528,000 bbls ultimate from proven area; 5,385,469 bbls recovered to Jan 1, 1936; 76,923 bbls recovered first 6 months 1936. **Principal Leaseholders:** O. W. Killam, Magnolia Petroleum Co., Crown Central Petroleum Corp., Sun Oil Co., Calumet Petroleum Co.

BLAS URIBE*

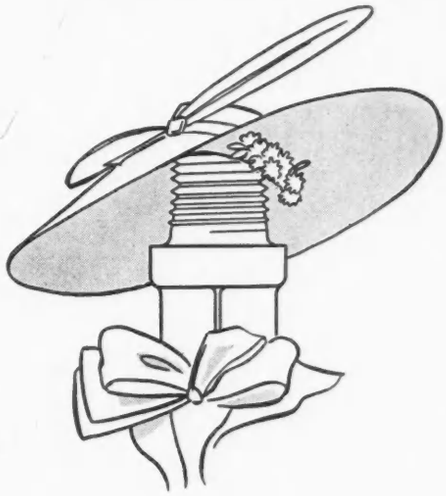
In Webb and Zapata Counties, includes Killam Subdivision of Share N-J, Blas Uribe 2561-acre tract in San Ignacio, and Tract "B" 7, El Ranchito 6723.5-acre tract, both in J. V. Borrego grant, 12 mi sw Mirando City. **Means of Discovery:** Trend play and geological information based on subsurface correlations. **Extent of Development:** 30 wells have been drilled in general area, most of them by O. W. Killam. These areas may be divided into two units. The Ranchito tract has developed gas with some oil around 1100 ft, while the Blas Uribe tract has two gassers at 1825-40 ft. The gas volume on these wells is estimated at 30,000,000 cu ft. While these wells are of commercial proportions, the area still is looked upon as an oil prospect and drilling is being continued. **Principal Leaseholder:** O. W. Killam has thousands of acres under lease.

CAROLINA-TEXAS

Sections 336, 268, 335 and adjoining sections. **Means of Discovery:** Geological information and trend play. **Discovery Data:** Carolina-Texas Oil & Gas Co.'s R. O. Barnsley 1, Nov. 19, 1921, 15,000,000 cu ft dry gas, 1280 ft, sand 1270-80 ft, elev 792 ft; Barnsley 2, Mar. 18, 1922, 25,000,000 cu ft dry gas, 2060 ft, top sand 1995 ft, shallower well, drilled deeper; R. O. Barnsley 5, Nov. 26, 1923, 65,000,000 cu ft gas, spraying 46 gravity oil, 3005 ft, sand 2947-3005 ft. Johnson De Tray's De La Garza 1, Oct., 1925, 40,000,000 cu ft gas, 2530 ft, sand 2525-30 ft. Associated Oil Co.'s C. H. Webster D-2-A, June 29, 1926, 2609 ft, sand 2599-2609 ft, 600 bbls 34 gravity oil. Carolina-Texas Oil & Gas Trust's Benavides 11, old producer at 3343 ft, deepened to 4996 ft, completed May 14, 1935, 3,000,000 cu ft gas spraying 40 bbls 42.5 gravity oil, ⅜-in choke, tubing 725 lbs, casing pressure 1425 lbs, closed-in pressure 1700 lbs; deepened to 5056 ft, 40,000,000 cu ft wet gas, ¼-in choke, tubing pressure 1500 lbs, casing 1700 lbs. **Geological Data:** Domal type structure, trending ne and sw, 2 separate highs on general structure, sand lensing. **Producing Horizon:** Ranging from Upper Jackson into Queen City section of Mount Selman. **Producing Area:** 1620 acres, 110 acres oil. **Extent of Development:** (to Jan. 1, 1936) 95 wells, 14 oil, 50 gas, 31 failures. (During 6 months 1936) 1 oil, 1 failure. **Deepest Hole:** Holland Reavis' C. H. Webster 1, abd 5527 ft, Feb. 20, 1936. **Daily Production, Aug. 1, 1936:** 17 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** United Gas System taking gas. **Reserve Data:** 275,000 bbls from ultimate proven area; 246,793 bbls recovered to Jan. 1, 1936; 1062 bbls recovered first 6 months 1936. **Principal Leaseholders:** The Texas Co., Carolina-Texas Oil & Gas Co., Houston Oil Co., George Marshall, R. O. Barnsley et al, Maddox et al, Usher Carson, Associated Oil Co., Killam et al.

*Prospect. †Salt dome, no production. ‡Gas field.

THE SMART SUCKER ROD MOTIF OF THE MONTH



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COLE

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LAUREL

Sections 270, 271, 720, 272, 23, 267 and 1100, 2 mi n Oilton. **Means of Discovery:** Geological information, based mainly on dry holes. **Discovery Data:** South Texas Oil Co.'s B. Rosenberg 2 (3), June 21, 1932, 150 bbls 49 gravity oil, ⅜-in choke, 2250 ft, sand 2244-50 ft, 6⅝-in casing 2241 ft, elev 775 ft. South Texas Oil Co.'s B. Rosenberg 5, July 22, 1932, 750,000 cu ft gas, 366 ft, sand 360-66 ft. South Texas Oil Co.'s Laurel 12, May 7, 1934, 20,000,000 cu ft gas, 1777 ft, sand 1770-77 ft, 6⅝-in casing 1768 ft, 600 lbs rock pressure. **Geological Data:** Several sand lenses broken by little faulting. **Producing Horizon:** Shallow gas from Frio, 1700-ft gas in Mirando and main oil sand in Cockfield. **Producing Area:** 580 acres, 260 acres oil. **Extent of Development:** (to Jan. 1, 1936) 66 wells, 32 oil, 1 gas, 27 failures. (During 6 months 1936) 1 failure. **Deepest Hole:** South Texas Oil Co.'s Laurel Bros. 1-A, abd 3165 ft, Sept. 25, 1936, in Mount Selman. **Daily Production, Aug. 1, 1936:** 40 bbls. **Rigs Running, Aug. 1, 1936:** 10. **Market Outlet:** South Texas Oil Co. to loading rack. **Reserve Data:** 780,000 bbls ultimate from proven area; 587,822 bbls recovered to Jan. 1, 1936; 5921 bbls recovered first 6 months 1936. **Principal Leaseholders:** Cole Petroleum Co., South Texas Oil Co., Montex Oil Co., Magnolia Petroleum Co., Wise & Jackson.

LEASEHOLDERS

Including Sections 22, 19, 72, 70, 71, 69, 117, 17, 66 and 14, east central section of county. **Means of Discovery:** Geological information and trend play. **Discovery Data:** Leaseholders Producing & Refining Corp.'s A. E. Gates 2, Sept. 16, 1922, 70 bbls 22 gravity oil, 1055 ft, sand 1049-55 ft, 6⅝-in casing 1030 ft, elev 569 ft. J. Elmer Thomas' A. E. Gates 2, Mar. 2, 1935, 500,000 cu ft gas, 165 lbs rock pressure, total depth 370 ft, producing horizon 360-70 ft. **Geological Data:** Small sand lens. **Producing Horizon:** Upper Jackson. **Producing Area:** 30 acres, 10 acres oil. **Extent of Development:** (to Jan. 1, 1936) 38 wells, 2 oil, 1 gas, 35 failures. (During 6 months 1936) None. **Deepest Hole:** Cintex Petroleum Co.'s J. B. Pool 1, Block 5, Section 72, abd 3034 ft, Apr. 25, 1927. **Daily Production:** abd. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** None. **Reserve Data:** 25,000 bbls recovered to Jan. 1, 1936, abd. **Principal Leaseholders:** J. Elmer Thomas, Illinois Petroleum Co., Gates Ranch Oil Co., Superior Oil Co.

LOPEZ

In Webb and Duval Counties, Sections 796, 383, 72, 73, 114, 113, 112, 111, 110 and 109, 14 mi n Bruni. **Means of Discovery:** Geological data, several failures had been drilled in area. **Discovery Data:** Mills Bennett's J. Lopez 1, June 24, 1935, 10,000,000 cu ft gas, 60 bbls 22 gravity oil, 5/16-in choke, 760 lbs tubing, 900 lbs casing pressure, total depth 2144 ft, producing horizon 2126-44 ft, perforated 2139-43 ft. **Geological Data:** Sand lensing on Monocline. **Producing Horizon:** Mirando sand, Jackson age. **Producing Area:** 1850 acres. **Extent of Development:** (to Jan. 1, 1936) 27 wells, 26 oil, 1 failure. (During 6 months 1936) 108 wells, 100 oil, 5 gas, 3 failures. **Deepest Hole:** Mills Bennett's J. Lopez 3, abd 3224 ft, Aug. 1, 1935. **Daily Production, Aug. 1, 1936:** 3560 bbls. **Rigs Running, Aug. 1, 1936:** 10. **Market Outlet:** Magnolia Pipe Line Co. **Reserve Data:** 13,390,000 bbls ultimate from proven area; 62,737 bbls recovered to Jan. 1, 1936; 484,715 bbls recovered first 6 months 1936. **Principal Leaseholders:** Cox & Hamon, G. G. Mortimer, Magnolia Petroleum Co., Gem Oil Co., Luling Oil & Gas Co., Mills Bennett, Grerra Oil & Royalty Co., Superior Oil Co., The Hunter Co., C. H. Lewis et al, Montour Oil Corp., Cole Petroleum Co., Humble Oil & Ref. Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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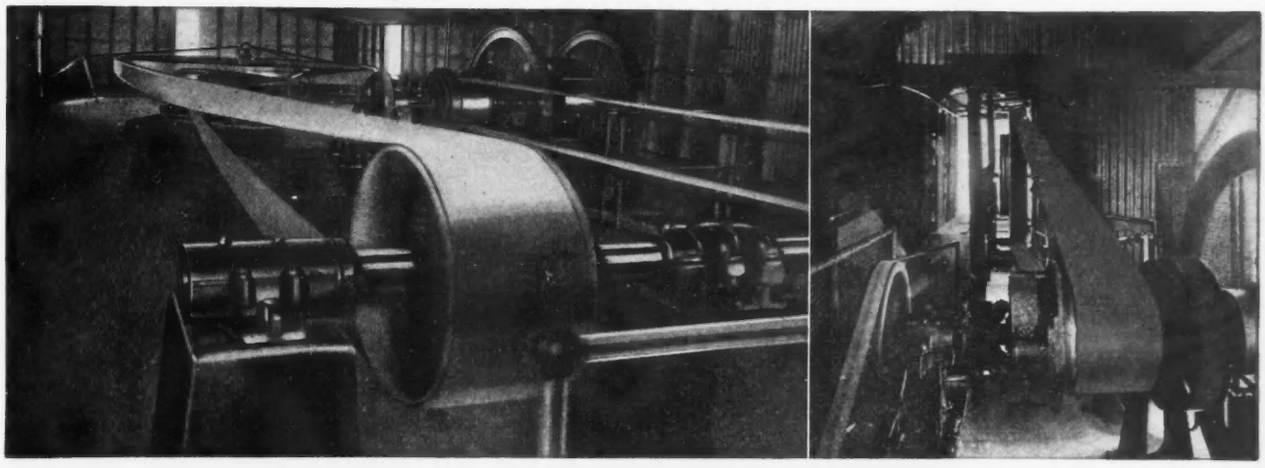

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MIRANDO CITY

Sections 457, 458, 58, 592, 1101, 54, 55, 460, 461, 2340, 463, 771, 2253, 2168, 462, 2341, 786, s Mirando City. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Schott Oil Co.'s E. Garcia 2, Dec. 10, 1921, 50,000,000 cu ft gas, 75 bbls 21.4 gravity oil, 1540 ft, producing horizon 1530-40 ft, elev 776 ft. Carnahan Prod. & Refining Co.'s E. Garcia 17, Mar. 31, 1923, 5,000,000 cu ft gas spraying 5 bbls 45 gravity oil, 1935 ft, producing horizon 1925-35 ft. **Geological Data:** Sand lensing. **Producing Horizon:** Hockleyensis section of Jackson age. **Producing Area:** 2400 acres, 1405 acres oil. **Extent of Development:** (to Jan. 1, 1936) 362 wells, 277 oil, 17 gas, 68 failures. (During 6 months 1936) None. **Deepest Hole:** Magnolia Petroleum Co.'s E. Garcia 1, abd 4193 ft. **Daily Production, Aug. 1, 1936:** 383 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Crown Central Petroleum Co., Texapata Refining Co. **Reserve Data:** 8,992,000 bbls ultimate from proven area; 8,461,891 bbls recovered to Jan. 1, 1936; 67,709 bbls recovered first 6 months 1936. **Principal Leaseholders:** Sinedo Oil Co., Crown Central Petroleum Co., Laredo Oil Co., Inc., Muen-Riol Oil Co., Magnolia Petroleum Co., Ross Amigos Oil Co., Ross Segundo Oil Co., George Buck.

MOCA

Zapata County Land Survey No. 3, southeastern portion of county, Section 3, 12 mi w Freer. **Means of Discovery:** Geological information. **Discovery Data:** Moca Oil Co.'s (was Milam Drilling Co.) Duval County Ranch Co. 1, Dec. 16, 1932, 100 bbls 21 gravity oil, 909 ft, producing horizon 903-09 ft, elev 499 ft, 6⅝-in casing 902 ft. **Geological Data:** Small sand lens, possibly some faulting. **Producing Horizon:** Jackson. **Producing Area:** 80 acres. **Extent of Development:** (to Jan. 1, 1936) 16 wells, 9 oil, 2 gas, 5 failures. (During 6 months 1936) None. **Deepest Hole:** Quintana Petroleum Co.'s Duval County Ranch Co. 2, total depth 2178 ft, plugged back to 900 ft. **Daily Production, Aug. 1, 1936:** 385 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Duval Pipe Line Co.'s line to Benavides. **Reserve Data:** 880,000 bbls ultimate from proven area; 445,365 bbls recovered to Jan. 1, 1936; 73,465 bbls recovered first 6 months 1936. **Principal Leaseholders:** D. R. Semmes, Quintana Petroleum Co., Moca Oil Co.

PESCADITO*

Centering around Section 1805, 15 mi ne Laredo. **Means of Discovery:** Surface structure. **Extent of Development:** O. W. Killam drilled Ortiz Ranch 2 to 3635 ft but did not find production in the Queen City sand and abd Jan. 17, 1936.

REISER

Centering around Sections 1618, 1617, 597, 295, 1620, 1570, 1571, 602, 1568, 1567, 602, 296, 1914, 1619, 1517, 331, 1248, 1859, nw Agullares. **Discovery Data:** Producers Oil Co.'s L. Reiser 2, 1909, 3,000,000 cu ft gas, 1010 ft, producing horizon 1001-10 ft; L. Reiser 4, 1910, 5 bbls oil, 400 ft, producing horizon 394-400 ft. **Geological Data:** Sand lensing. **Producing Horizon:** Jackson series. **Producing Area:** 1290 acres, 20 acres oil. **Extent of Development:** (to Jan. 1, 1936) 72 wells, 3 oil, 15 gas, 54 failures, (During 6 months 1936) None. **Deepest Hole:** O. W. Wheatley's Johnson 1, abd 3247 ft, had oil sands 451-63 ft, Section 1618. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Not producing. **Reserve Data:** 4000 bbls ultimate from proven area; 4000 bbls recovered to Jan. 1, 1936; none recovered first 6 months 1936. **Principal Leaseholders:** O. W. Killam, South Texas Plains Oil & Gas Co., Producers Oil Co.

WEST COLE

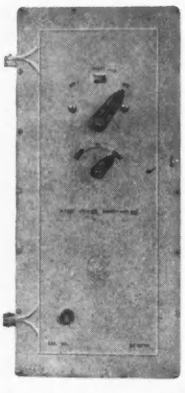
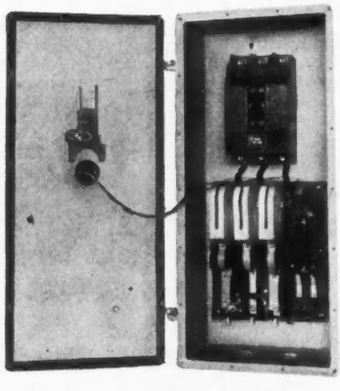
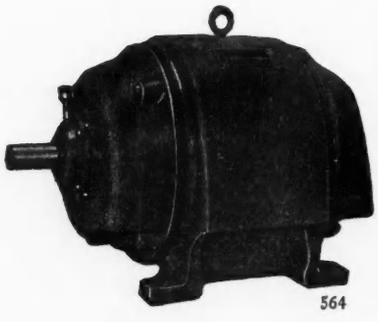
Sections 661, 662, 660, 659, 696, 697, 694, 698, 701, 693, 753, 754 and 411, 2 mi nw Bruni townsite. **Means of Discovery:** Geological information, attempt to extend Cole field to west. **Discovery Data:** Cole Petroleum Co.'s Rosa Benavides 36, Apr. 12, 1927, 80,000,000 cu ft gas, 2330 ft, producing horizon 2326 ft, elev 790 ft, later wells developed oil production, 21.5 gravity. **Geological Data:** Sand lensing with oil producing on flanks. **Producing Horizon:** Jackson. **Producing Acreage:** 1750 acres, 420 acres oil. **Extent of Development:** (to Jan. 1, 1936) 151 wells, 87 oil, 26 gas, 38 failures. (During 6 months 1936) None. **Deepest Hole:** Cole Petroleum Co.'s Benavides 36, abd 5525 ft, lost hole, 1927. **Daily Production, Aug. 1, 1936:** 592 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** Houston Pipe Line Co., Magnolia Pipe Line Co. **Reserve Data:** 3,990,000 bbls ultimate from proven area; 3,087,793 bbls recovered to Jan. 1, 1936; 104,697 bbls recovered first 6 months 1936. **Principal Leaseholders:** French Oil Corp., Magnolia Petroleum Co., Houston Oil Co., Cole Petroleum Co., John O'Hern.

WILLACY COUNTY

LA SAL VIEJO*

Share 64, San Juan de Carritos grant, in northwestern portion of county and just south of salt lake. **Means of Discovery:** Geophysical study and geological information. Salt lake and surface indications suggest deep-seated salt dome. **Extent of Development:** Shell Petroleum Corp. et al's Yturria Land & Cattle Company 1, Sept. 1, 1936, has set 7600 ft of 9⅝-inch casing, bottomed 7662 ft, sand and shale series 7630 to bottom, casing being set primarily to protect hole. **Principal Leaseholders:** Sun Oil Co., California Co., Shell Petroleum Corp., Magnolia Petroleum Co.

*Prospect. †Salt dome, no production. ‡Gas field.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WILLIAMSON COUNTY

BYERSVILLE

Cartwright, White and adjoining surveys, 8 mi se Taylor. **Means of Discovery:** Geological information. **Discovery Data:** Fritz Fuch's Zeischang 1, Oct. 1933, 25 bbls 37 gravity oil, 904 ft, producing horizon 855-904 ft. **Geological Data:** Domal type structure with several fingers off main structure. **Producing Horizon:** Serpentine. **Producing Area:** 230 acres. **Extent of Development:** (to Jan. 1, 1936) 77 wells, 47 oil, 30 failures. (During 6 months 1936) 4 failures. **Deepest Hole:** H. F. Goff et al's Timmerman 1, abd 2353 ft in Edwards lime topped 2270 ft, Apr. 25, 1935. **Daily Production, Sept. 1, 1936:** 397 bbls. **Rigs Running, Sept. 1, 1936:** 2. **Market Outlet:** Taylor Refining Co. local refinery. **Reserve Data:** 1,058,000 bbls ultimate from proven area; 260,498 bbls recovered to Jan. 1, 1936; 55,031 bbls recovered first 6 months 1936. **Principal Leaseholders:** B. E. Pierce, Taylor Refining Co., Fritz Fuchs, Ogden & Reed, Hays Gee, Ogden & Reed.

CHAPMAN

Centering around Simon Miller Survey. **Means of Discovery:** Geological informaton. **Discovery Data:** E. L. Chapman and G. B. Peterman's J. C. Abbot 1-A, Jan. 8, 1930, 1845 ft, initial production 2½ million cu ft gas, 400 bbls 37.2 gravity oil, producing horizon 1831-45 ft. **Geological Data:** Domal type structure. **Producing Horizon:** Caprock on serpentine plug. **Producing Area:** 350 acres. **Extent of Development:** (to Jan. 1, 1936) 152 wells, 128 oil, 24 failures. (During 6 months 1936) None. **Deepest Hole:** In Edwards lime 3226 ft. **Rigs Running, Sept. 1, 1936:** None. **Market Outlet:** Lanning-Coffield have gathering system. **Reserve Data:** 4,620,000 bbls ultimate from proven area; 4,033,682 bbls recovered to Jan. 1, 1936; 60,269 bbls recovered first 6 months 1936. **Principal Leaseholders:** H. H. Coffield, Westbrook Oil Corp., E. L. Chapman et al.

*Prospect. †Salt dome, no production. ‡Gas field.

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ZAPATA COUNTY

ANDREWS ‡

Sections 613, 11, 12, 182, 125, 309, 10 mi s Mirando City, at corner of Webb, Zapata and Jim Hogg counties. **Means of Discovery:** Trend play. **Discovery Data:** Andrews Petroleum Co.'s P. Benavides 1, Mar. 17, 1924, 25,000,000 cu ft gas, total depth 1535 ft, producing horizon 1511-13 ft, elev 723 ft derrick floor. **Geological Data:** Some faulting and lensing. **Producing Horizon:** Jackson formations. **Producing Area:** 2000 acres. **Extent of Development:** (to Jan. 1, 1936) 21 wells, 11 gas, 10 failures. (During 6 months, 1936) None. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** United Gas System. **Reserve Data:** Gas field. **Principal Leaseholders:** Associated Oil Co., Andrews Petroleum Co., Lowe & Rogers, O. W. Killam, L. O. Gleason.

CHARCO REDONDO

Charco Redondo Grant, se part of county. **Discovery Data:** Zapata Oil & Gas Co.'s J. M. Martinez 1, 1913, 25 bbls 17 gravity oil, top sand 165 ft, elev 450 ft. W. R. Duke et al's J. M. G. Martinez 1, June 10, 1928, 10,000,000 cu ft gas, 994 ft, top sand 989 ft. **Geological information:** Sand lensing on shore-line structure. **Producing Horizon:** McElroy zone, Jackson age. **Producing Area:** 550 acres, 350 acres oil. **Extent of Development:** (to Jan. 1, 1936) 254 wells, 222 oil, 3 gas, 29 failures. (During 6 months 1936) none. **Deepest Hole:** Cockfield test, 3000 ft. **Rigs Running, Sept. 1, 1936:** None. **Market Outlet:** Humble Pipe Line Co. **Reserve Data:** 175,000 bbls ultimate from proven area. 138,672 bbls recovered to Jan. 1, 1936. 3102 bbls recovered first 6 months 1936. **Principal Leaseholders:** L. G. Smith, Bob & Richey, R. A. King, Palm City Oil Co.

COMITAS

Blocks 3, 4, 5, 7, 8, A. D. Haynes Subdivision, Comitas and Villas Grants. **Means of Discovery:** Geological information and trend play. **Discovery Data:** Merle Gunby et al's Alice D. Haynes 1, Aug. 29, 1934, 30 bbls 21.4 gravity oil, 6⅝-inch choke, 824 ft, producing horizon 814-24 ft, elev 416.7 ft. **Geological Data:** Sand lensing. **Producing Horizon:** Upper Jackson. **Producing Area:** 420 acres. **Extent of Development:** (to Jan. 1, 1936) 9 wells, 7 oil, 2 failures. (During 6 months 1936) 19 wells, 17 oil, 2 failures. **Deepest Hole:** Merle Gunby's Alice D. Haynes 3, abd 3502 ft, Nov. 27, 1934. **Daily Production, Aug. 1, 1936:** 730 bbls.. **Rigs Running, Aug. 1, 1936:** 6. **Market Outlets:** Connection to trunk line system in Escobas field. **Reserve Data:** 1,784,000 bbls ultimate from proven area. 3387 bbls recovered to Jan. 1, 1936. 35,292 bbls recovered first 6 months 1936. **Principal Leaseholders:** United Producing Co., Magnolia Petroleum Co., Mid-Continent Petroleum Corp., Clover Oil & Gas Co., J. P. Nash, Upchurch & McKay, Nordan & Morris.

CUELLAR

Cerrito Blanco Grant, Section 245, ne Jennings gas field. **Means of Discovery:** Geological information, trend play. **Discovery Data:** Magnolia Petroleum Co.'s E. Cuellar 3, Feb. 14, 1927, 3,000,000 cu ft gas, spraying 22 gravity oil, 1350 ft, sand 1340-50 ft, elev 551 ft. **Geological Data:** Small sand lens. **Producing Horizon:** Hockleyensis section of Jackson series. **Producing Area:** 485 acres, 340 acres oil. **Extent of Development:** (to Jan. 1, 1936) 107 wells, 77 oil, 6 gas, 27 failures. (During 6 months 1936) None. **Deepest Hole:** Magnolia Petroleum Co.'s R. Cuellar 1, Sec-278, abd 3040 ft. **Daily Production, Aug. 1, 1936:** 122 bbls. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Texapata Refining Co. **Reserve Data:** 2,669,000 bbls ultimate from proven area. 2,403,938 bbls recovered to Jan. 1, 1936. 22,648 bbls recovered first 6 months 1936. **Principal Leaseholders:** O. W. Killam, Magnolia Petroleum Co., Trapshooter Reilly, Brooklyn Oil Co.

ESCOBAS

Las Comitas Grant, Cerrito Blanco Grant, Sections 64, 65, 66, 412, 521. **Means of Discovery:** Geological information, drilling on flanks of large gas structure. **Discovery Data:** H. Muckelroy, Jr.'s (Trevino Oil Co.) Trevino 1, May 26, 1929, 30,000,000 cu ft gas, and spraying 12 bbls 22.1 gravity oil, 1302 ft, sand 1292-1302 ft, elev 521 ft. O. & A. Oil Co.'s E. Garcia 2, June 6, 1930, 12,000,000 cu ft gas, 1035 ft, sand 1029-35 ft. Fairway Production Co.'s J. Bustamante 1, Apr. 29, 1931, 260 bbls 21 gravity oil, 1490 ft, sand 1485-90 ft. **Geological Data:** Sand lensing structure. Several separate sand beds, apparently some faulting. **Producing Horizon:** Jackson series. **Producing Area:** 2400 acres, 1840 acres oil. **Extent of Development:** (to Jan. 1, 1936) 373 wells, 295 oil, 15 gas, 66 failures. (During 6 months 1936) 17 wells, 13 oil, 4 failures. **Deepest Hole:** SR&C Corp.'s E. Trevino 4, Block 13, Section 65, abd 3500 ft. **Daily Production, Aug. 1, 1936:** 1815 bbls. **Rigs Running, Aug. 1, 1936:** 1. **Market Outlet:** Humble Pipe Line Co., Texas Pipe Line Co. **Reserve Data:** 12,604,000 bbls ultimate from proven area. 5,565,070 bbls recovered to Jan. 1, 1936. 316,786 bbls recovered first 6 months 1936. **Principal Leaseholders:** Allied Oil & Gas Co., Nordan & Morris, Trevino Oil Corp., SR&C Oil Corp., Palmer Oil Co., Winch & Billings, Alamo Drilling Co., Grimm & Yakey, Keel Production Co., O. & A. Production Co., Newton et al, O. W. Killam, H. Muckelroy, Lobo Oil Corp., McGinely Corp., J. M. Gier, Fairway Production Co., F. H. Ether-

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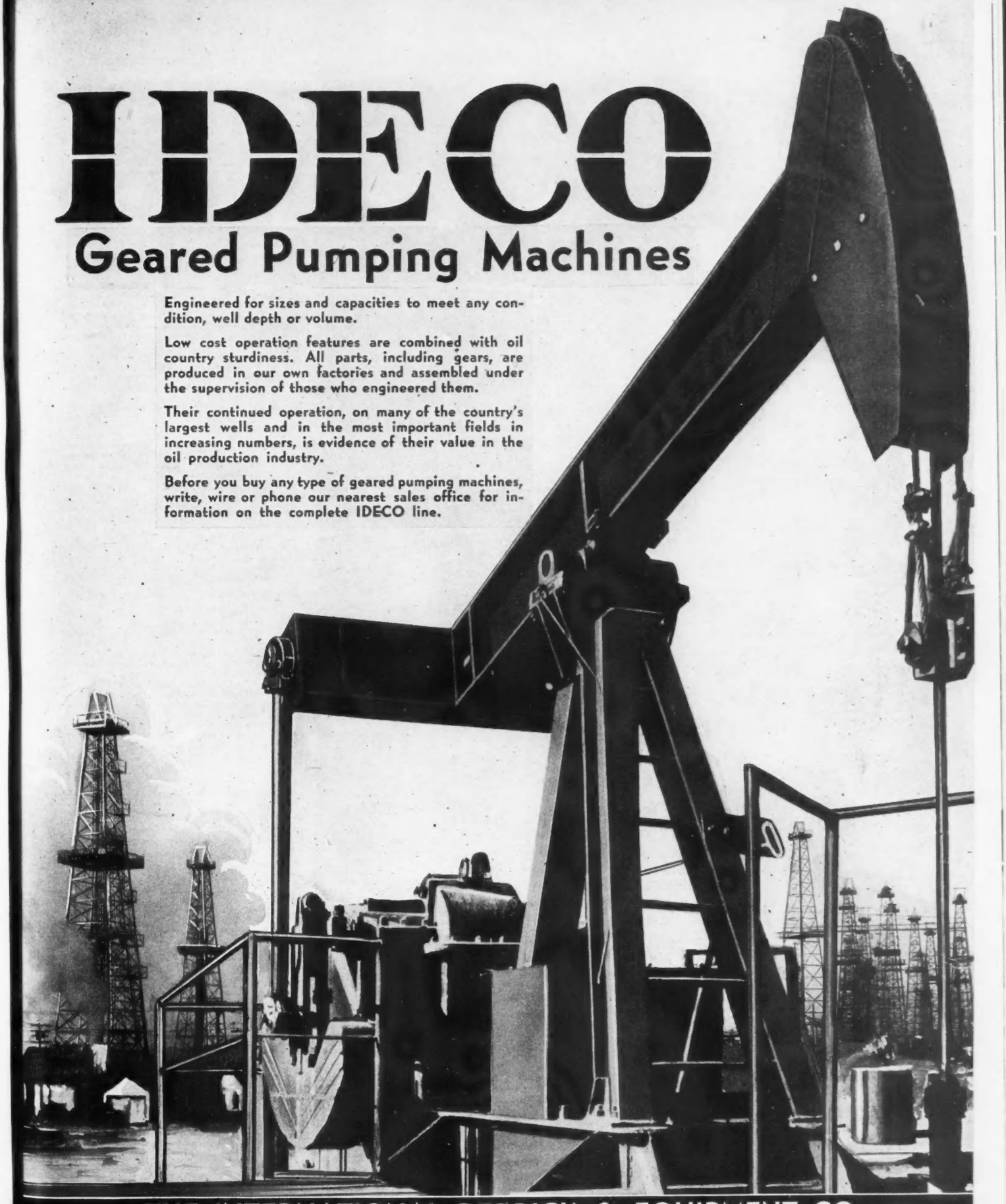

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JENNINGS‡

Cerrito Blanco Grant, ne portion of county. **Means of Discovery:** Little information, likely result of showings in water wells. **Discovery Data:** Joe D. Jennings' Whitehead et al (Jennings) 1, Mar. 19, 1914, 8,000,000 cu ft gas, 1425 ft, top sand 1410 ft, elev 482 ft. The Texas Co.'s Whitehead et al 1, Sept. 20, 1927, 10,000,000 cu ft gas, 915 ft, sand 905-15 ft; Whitehead 4, Mar. 19, 1927, 65,000,000 cu ft gas, 1963 ft, sand 1955-63 ft. **Geological Data:** Large domal-type structure with axis almost due north and south, several sand lenses. **Producing Horizon:** Jackson series. **Producing Area:** Total 2000 acres, none in oil. **Extent of Development:** (to Jan. 1, 1936) 35 wells, 12 gas, 23 failures. (During 6 months 1936) none. **Deepest Hole:** The Texas Co.'s Whitehead 2 (Jennings) Cerrito Blanco, abd 4645 ft, July 15, 1926; sand at 3991-96 ft, 4181-83 ft. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running, Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholders:** The Texas Company, and United Production Corp.

LOPENO‡

Share 20, Porcion 19, e Lopeno. **Means of Discovery:** Geological information and geophysical work. **Discovery Data:** R. B. Morrison's V. & R. Ramirez 1, (Los Burros Ranch), July 10, 1934, 20,000,000 cu ft gas, 2170 ft, 7-in casing 2040 ft, lime 2040-41 ft, sand 2040-64 ft, shale 2064-69 ft, sand 2069-86 ft, streaky shale and lime 2086-2122 ft, shale 2122-47 ft, sand 2147-70 ft. **Geological Data:** Anticlinal structure with two individual highs. **Producing Horizon:** Queen City sand in Mount Selman. **Producing Area:** 2750 acres. **Extent of Development:** (to Jan. 1, 1936) 11 wells, 10 gas, 1 failure. **Deepest Hole:** Gem Oil Co.'s J. G. Ramirez 1, 3502 ft, plugged back 2152 ft, perf 2134-52 ft, July 12, 1935, 10,000,000 cu ft gas, 925 lbs rock pressure. **Daily Production, Aug. 1, 1936:** gas. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Connection to United Gas System's Monterrey line. **Reserve Data:** Gas. **Principal Leaseholders:** R. B. Morrison, Jamison et al, Thor Warner, Harry Keefe, Nordan & Morris, Atkins & O'Neil, Gem Oil Co., Venture Petroleum Co.

MARTINEZ‡

Sections 2, 6, 61, 4, 285, 411, 13, 162, 161, 286, 19, 63, eastern portion of county. **Means of Discovery:** Geological information. **Discovery Data:** Magnolia Petroleum Co.'s F. G. Martinez 1, Aug. 16, 1929, 30,000,000 cu ft gas, 620 lbs rock pressure, total depth 1927 ft, sand 1921-27 ft, elev 693 ft. **Geological Data:** Sand lensing structure. **Producing Horizon:** Hockleyensis section of Jackson series. **Producing Area:** 850 acres. **Extent of Development:** (to Jan. 1, 1936) 34 wells, 20 gas, 14 failures. (During 6 months 1936) None. **Deepest Hole:** S. R. & C. Oil Corp.'s F. Cuellar 1, Block 16, Section 285, abd 2450 ft, sand 1679 ft, elev 549 ft, Dec. 21, 1930. **Daily Production, Aug. 1, 1936:** Only gas. **Rigs Running Aug. 1, 1936:** None. **Market Outlet:** United Gas System. **Principal Leaseholders:** Henne & Winch, O. W. Killam, Shankle et al, S. R. & C. Oil Corp., Magnolia Petroleum Co., United Petroleum Co., K. & M. Oil Co., H. C. Muckelroy, P. H. Nielson, Newton et al, F. H. Etheridge Estate, Grayburg Oil Co.

*Prospect. †Salt dome, no production. ‡Gas field.

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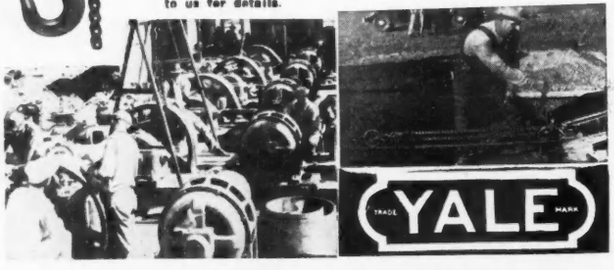

THE YALE & TOWNE MANUFACTURING CO.
PHILADELPHIA DIVISION — PHILADELPHIA, PA.

MIRANDO VALLEY

Sections 116, 182, 76, 251, 10, 307, 114, 112, 113, 253, 18, 240, 613, 11, 9, 125, 307, 249, 126, 836, and part of Albercas Grant. **Discovery Data:** Mirando Oil Co.'s (O. W. Killam), R. Hinnant 3, Apr. 17, 1921, 40 bbls 21 gravity oil, 1423 ft, sand 1416-23 ft, elev 707 ft. **Geological Data:** Sand lensing situation. **Producing Horizon:** Hockleyensis section of Jackson series. **Producing Area:** 380 acres, 140 acres oil. **Extent of Development:** (to Jan. 1, 1936) 120 wells, 30 oil, 19 gas, 71 failures. (During 6 months 1936) None. **Deepest Hole:** O. W. Killam's R. Hinnant 4, Section 76, Block 11, abd 2946 ft. **Daily Production, Aug. 1, 1936:** 32 bbls **Rigs Running, Aug. 1, 1936:** None. **Market Outlets:** Texapata Refining Co. **Reserve Data:** 665,000 bbls ultimate from proven area. 623,504 bbls recovered to Jan. 1, 1936. 5492 bbls recovered first 6 months 1936. **Principal Leaseholders:** Magnolia Petroleum Co., O. W. Killam. Wells originally drilled by number of companies, but practically all production has been acquired by these operators.

PAPPAS*

SW end of Porciones 33 and 34, 1 mi se Zapata. **Means of Discovery:** Surface and subsurface information. **Extent of Development:** About six wells have been drilled, one resulting in a gasser. John Pappas' Cuellar 1, completed June 21, 1929 as a small gasser at 1408 ft, possibly in the Cook Mountain.

RANCHITO*

Porcion 31, 9 mi e of Zapata. **Means of Discovery:** Surface anticlinal structure. **Extent of Development:** Humble Oil & Refining Co.'s E. Dominguez 1, abd Oct. 16, 1935, 5973 ft in Wilcox formation; several shows of gas and salt water in the Lopeno sand, of Queen City Horizon of the Mount Selman below 2116 ft.

VILLA‡

Villa Grant and several sections n and ne, ne portion of county. **Means of Discovery:** Geological information and trend play. **Discovery Data:** Winch & Billings' S. Benavides 1, Oct. 24, 1932, 15,000,000 cu ft gas, 1673 ft, 375 lbs rock pressure, sand 1657-64 ft, elev 672 ft. **Geological Data:** Sand lensing situation, shore-line structure like remainder of Mirando District. **Producing Horizon:** McElroy zone of Jackson. **Producing Area:** 120 acres. **Extent of Development:** (to Jan. 1, 1936) 6 wells, 3 gas, 3 failures. (During 6 months 1936) None. **Deepest Hole:** One test drilled to Cook Mountain at 3000 ft. **Daily Production, Aug. 1, 1936.** Only gas. **Rigs Running, Aug. 1, 1936:** None. **Market Outlets.** United Gas System. **Reserve Data:** Gas field. **Principal Leaseholders:** Winch & Billings, French Oil Corp., J. J. O'Hern, Danvers & Harrison, The Texas Co., Mid-Continent Petroleum Corp., Magnolia Petroleum Co., Harry Fansler.

WRAY*

Centering Share 9, Fullerton Subdivision, Borrego Grant in northwestern portion of county. **Means of Discovery:** Geological information. **Extent of Development:** About 8 wells have been drilled in area, mostly shallow. Arthur H. Wray completed Gopher Trust Estate 1, June 22, 1933, for 5,000,000 cu ft gas, 348-70 ft in Jackson, elev 498 ft. It showed 150 lbs rock pressure. About 60 acres have been proved with two gassers in this sand, but no oil wells have been developed. Several wells drilled to 2000 ft.

ZAVALLA COUNTY

BATESVILLE

Centering around the George West and Carmichael ranches, including Bustillo Survey northwest to AB&M Survey No. 1, 8 mi sw Batesville. **Means of Discovery:** Geological and geophysical work has been done. **Extent of Development:** Leona Oil Corp.'s George West 1, abd July 28, 1936, 6020 ft, Austin chalk 5760 ft, some gas in the Navarro sand between 4320-80 ft. Frank Buttram's Whitecotton 1, abd 5787 ft, Austin chalk at 5281 ft.

CRYSTAL CITY*

Centering an area southeast of AB&M, Section 43, 10 mi ne of Crystal City. **Means of Discovery:** Geological and geophysical work done on block, also in trend with Pearsall and Doering fields. **Extent of Development:** Bay Oil Corp.'s National Bank of Commerce 1, abd Aug. 1, 1936, 7082 ft, showing sulphur water in Edwards lime topped 6860 ft, Austin chalk 5717 ft, set casing 5724 ft and showed slight saturation at various points to 6200 ft. Drilled to 6585 ft, plugged back to 6250 ft, acidized, but showed insufficient oil to make a producer, then drilled to 6860 ft, and abnd. Test considered on nw side of structure.

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Demand Continues

GASOLINE MARKET LOSES TENDENCY TO SOFTNESS

CONTINUED brisk demand for gasoline steadied prices which had shown a tendency toward weakness. Ideal motoring weather of the early fall is resulting in steady consumption which in turn has aroused briskness in orders from jobbers, both in the open market and on contract. Another factor that turned the trend of price weakness was disposition of refiners to cut runs to stills.

Announcement of two 10-cent crude cuts and adjustment of tank wagon prices in the Middle-West caused concern in some quarters, but not seriously enough to halt a general better feeling as regards the entire market.

So far the weakening of the Mid-Continent crude oil market may be classed as psychological. Nothing has happened to indicate that price reductions will come into the area still the fact that reductions have been made in some eastern fields is accepted as an indication of possible reduction.

There have been no efforts of crude oil buyers to get rid of connections, no hesitation about making connections to new wells and no indications that buyers will hesitate to take current output, which is in excess of estimates set by the Bureau of Mines as proper for Oklahoma and Kansas.

The long range view is encouraging. Oklahoma is without a coming area of flush production. In Kansas a new field is announced most every week, still the area of these western Kansas fields is limited and the result is that no great quantities of oil are backed up for future distribution.

Corrections in retail gasoline quotations in the Middle West are another reason for the slight apprehension among producers. Reductions of three tenths of a cent a gallon were made last week in many cities of the area. These came only where the tank wagon market was normal. Where price wars had prices below the normal level no changes were made.

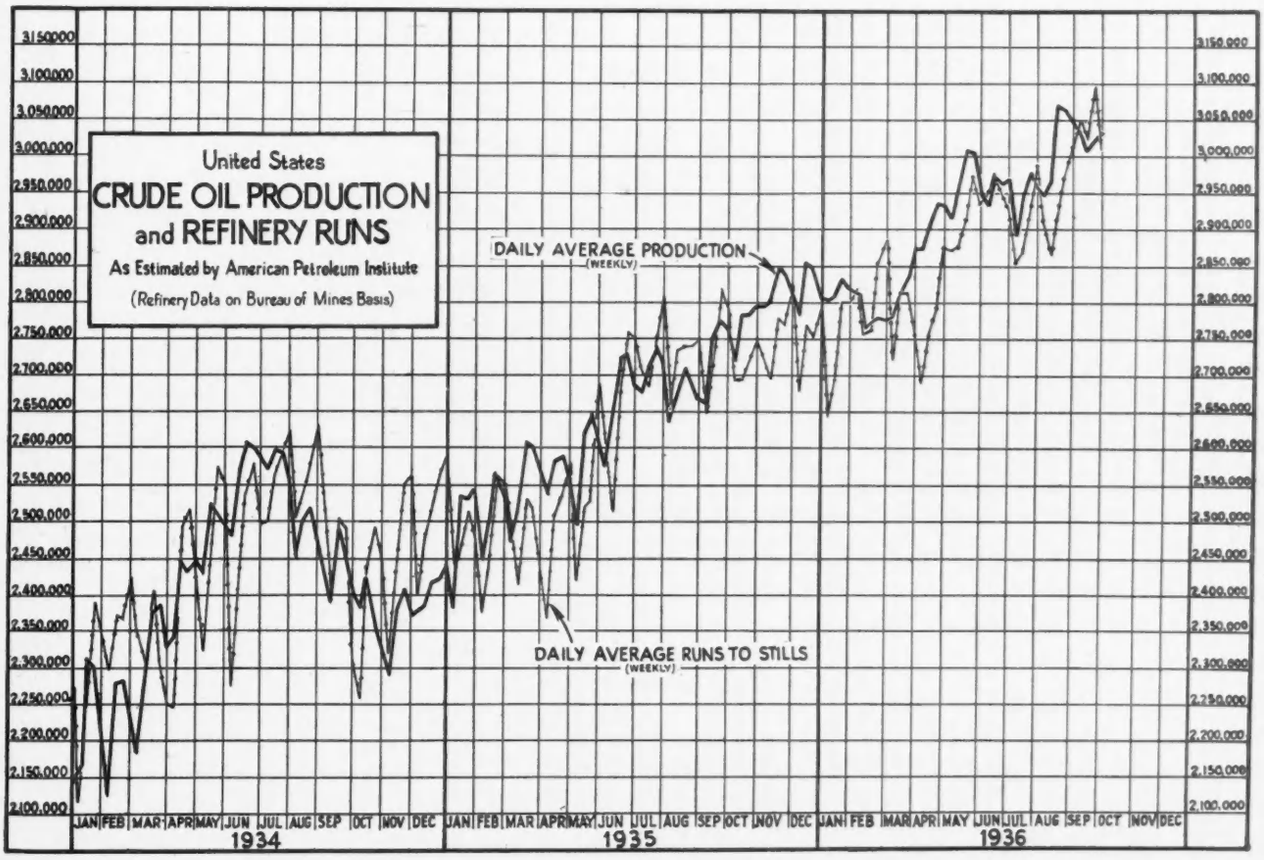
Rains in the drouth area has caused a better demand for low octane gasoline and kerosene for use in plowing. Demand for light fuel oils still is brisk with refiners reluctant to give up their supplies. Heavy fuel oil is moving in volume to railroads and industrial plants.

Prices of U. S. motor gasoline in the Oklahoma market appeared late last week to be about as follows: 62 octane and below, 4½ to 4¾ cents a gallon; 63 to 67 octane 4⅞ to 5⅜ cents and 68 to 70 octane, 5½ to 5¾ cents.

In the Chicago market the corresponding prices were : 4⅜ to 4¾ cents, 4¾ to 5¼ cents and 5¼ to 5½ cents.

Kerosene prices continued unchanged, the 41-43 water white grade at 3 to 3¼ cents in both the Oklahoma and Chicago markets, and the 42-44 water white grade at 3⅛ to 3¼ f.o.b. Oklahoma refineries and at 3⅛ to 3½ cents in the Chicago territory.

Reports received by the American Petroleum Institute from refining companies owning 89.8 percent of the 3,941,000 barrels estimated daily potential refining capacity of the United States, indicate that the industry as a whole during the week ended September 19, ran to stills, on a Bureau of Mines basis, 3,010,000 barrels of crude oil daily during the week, and that all companies had in storage at refineries, bulk terminals, in transit and in pipe lines as of the end of the week, 57,286,000 barrels of finished and unfinished



gasoline and 113,118,000 barrels of gas and fuel oil.

Cracked gasoline production by companies owing 95.9 percent of the potential charging capacity of all cracking units indicates that the industry as a whole, on a Bureau of Mines basis, produced an average of 665,000 barrels daily during the week.

Crude runs to stills was 85,000 barrels per day less than for the previous week, and stocks of gasoline at refineries and in transit were decreased 632,000 barrels.

Field Reports

Field work in the United States, as reflected by the number of wells completed, continues below recent averages. Completion reports for the week included 424 wells, of which 315 were oil producers whose aggregate initial rating was 465,161 barrels. There were 24 new gas wells and 85 failures. Much of the drop in well completions, and particularly in the number of oil producers and initial production, is due to slackening in the East Texas field. South Texas of late has been recording an increasing number of completions, but results there do not compare with the high rating of East Texas where there are few failures and initial gauges are high. With the East Texas field adding only 31 new producers which is about half of the number which was the weekly average up until a short time ago, initial rating given 179 new producers in Texas was 201,537 barrels, whereas in Oklahoma 49 new producers were rated as having an aggregate initial of 205,509 barrels.

The week's results brought the 1936 total of well completions to 17,715 as against 15,773 at this time a year ago.

In the matter of new work, Texas again is increasing its substantial lead, 272 permits authorized during the week bringing the September total to 1240 and the year total to 11,262. The latter figure compares with 16,687 for all districts so far this year. Both Oklahoma and Kansas had more completions than first reports during the week.

Eastern Crude Cut

Effective September 19, Joseph Seep Purchasing Agency announced reduction of Corning Grade crude by 10 cents to $1.32 per barrel. The former price had been in effect since January 13. On September 22, The Ohio Oil Company reduced Lima Crude 10 cents per barrel to $1.15. The former price had been in effect since January 10, 1936.

Comparison of Permits Granted for New Wells

STATE	Week Ending Sept. 26	Total this Mo.	Total this Year	Total this Date Last Year	1935 Year Total
Arkansas	...	7	72	41	70
California	15	94	773	691	925
Louisiana	31	98	887	604	846
Kansas	22	114	1,334	847	1,204
Michigan	11	45	540	501	749
Oklahoma	57	192	1,819	1,628	2,311
Texas	272	1,240	11,262	8,147	10,800
Total	408	1,790	16,687	12,459	16,964

Stock Deal

SOUTH PENN AND TIDE WATER BUY PENN'S STOCK

New York.—As the result of a transaction consummated recently, the 315,414 shares of South Penn Oil Company, formerly owned by General Education Board, have been acquired by Tide Water Associated Oil group and South Penn Oil Company. The Tide Water Associated group acquires 172,743 of these shares and South Penn acquires 142,671 shares of its own stock, for retirement and cancellation. The purchase was stated to have been made at $35 per share against the currently quoted price of $39 per share. Tide Water Associated, already the largest customer of South Penn, now becomes also one of its principal stockholders.

Through this acquisition Tide Water Associated, the largest user of Pennsylvania grade crude oil, cements its long-time relationship with South Penn, the largest producer of Pennsylvania grade crude. The transaction is in line with Tide Water Associated's policy of strengthening its position with suppliers of crude oil. The two companies are already equal owners of the largest gathering system in the Bradford, Pa., area.

One of the major units of the Tide Water Associated group built the first trunk line outlet from the Bradford, Pa., field, and the group has continued as a leading purchaser and gatherer of Pennsylvania grade crude oil since 1878. Seven years ago it consolidated its gathering systems with that of South Penn Oil Company and they now have equal ownership in the Bradford Transit Company, today the largest gatherers of Pennsylvania crude.

South Penn Oil Company is a Pennsylvania corporation, founded in the year 1889 with a capital of 1,200,000 authorized shares of $25 par value common stock, of which 1,142,671 shares are outstanding. The company has no funded debt or preferred stock and the common shares are currently receiving a 60 cent dividend quarterly.

South Penn Oil Company owns 24,000 acres of producing properties located in the rich Bradford area. These holdings represent approximately one-third of this field so well known for its production of Pennsylvania grade crude oil from which high quality lubricating oils are manufactured. In addition South Penn controls 382,000 acres of producing oil and gas properties in other fields in Pennsylvania, and also in West Virginia and Kentucky, representing approximately one-fourth of the total recoverable oil reserves now known to exist in the entire Pennsylvania grade area. Included in the West Virginia properties are 56,000 acres producing natural gas. This area has one of the most valuable concentrated natural gas deposits in the eastern states.

Summary of Wells Completed in the United States Week Ending September 26, 1936

	Completions	Oil Wells	Gas Wells	Failures	Initial Production	Total Completions 1936	Total Completions this Date 1935
Alabama	....	....	....	....	.....	2	4
Arkansas	1	1	....	....	115	74	102
California	23	23	....	....	7,140	794	635
Colorado	....	....	....	....	.....	10	8
Illinois	....	....	....	....	.....	4	9
Indiana	....	....	....	....	.....	147	158
Kansas	32	19	....	13	20,596	1,229	1,046
Kentucky	4	4	....	....	110	208	129
Louisiana	24	17	2	5	23,377	778	541
Michigan	16	5	3	8	285	577	408
Mississippi	....	....	....	....	.....	5	16
Montana	4	4	....	....	282	128	122
New Mexico	11	9	1	1	6,319	423	216
New York	....	....	....	....	.....	....	....
Ohio	19	4	8	7	53	1,361	1,096
Oklahoma	67	49	3	15	205,509	2,181	1,769
Pennsylvania	....	....	....	....	.....	....	96
Texas	218	179	3	36	201,537	9,247	8,981
Utah	....	....	....	....	.....	....	1
West Virginia	4	....	4	....	.....	480	361
Wyoming	1	1	....	....	120	62	54
Florida	....	....	....	....	.....	2	....
Total this week	424	315	24	85	465,161	17,715	15,773
Total last week	426	290	38	98	292,602	....	....
Total this year	17,715	11,909	1,648	4,158	16,967,036	....	....

OIL OUTPUT DOWN

Daily average declines from high of last week

The United States daily average crude oil production for the week ended September 26 declined 25,425 barrels, averaging 3,026,550 barrels for the period, exclusive of oil surreptitiously produced. The decline came after a sharp upturn during the previous week had approached the all-time peak for a weekly period. The weekly average still is far above the total recommended by the Bureau of Mines, and is considered considerably out of line with fall requirements.

Oklahoma accounted for almost 10,000 barrels of the average daily decline, despite a sharp rise in the output from miscellaneous fields. The Seminole area showed a decline of almost 60,000 barrels daily, a very sharp drop for one district. The Oklahoma City field showed a nominal decline.

Texas, as usual, showed a small fluctuation, dropping to a daily average of 1,155,300 barrels for a loss of 9500 barrels. West Texas and Gulf Coast fields account for most of the decline.

Kansas fields showed an increase during the week, with the miscellaneous areas accounting for the rise.

A decrease of 12,000 barrels was recorded in the California daily average for the period, with the Midway-Sunset area accounting for the bulk of the decline. Most of the semi-flush and settled fields showed nominal changes.

New Mexico fields continued to climb, showing a daily average of 79,500 barrels for the weekly period. Steady development in this state has been reflected in an increased daily output.

Louisiana production showed little change during the week, with both the north and south parts of the state remaining steady from the previous week.

Mountain and Eastern states showed only nominal changes during the week.

Surreptitiously produced oil in the East Texas field, not included in the Texas or United States totals above, was estimated at 15,000 barrels. This type of production has shown little change for several weeks, and is not considered a market factor.

SET ALLOWABLE

Oklahoma's October yield set at bureau figure

Oklahoma City.—Oklahoma oil producers September 25 approved 559,900 barrels daily as the proper allowable for the state during October. This is the figure set by the United States Bureau of Mines as desirable. It represents a reduction of 3100 barrels daily under the September allowable. The figure is expected to become official with approval of the Oklahoma Corporation Commission.

The petroleum industry is one of the largest industrial purchasers of lawnmowers and brooms, buying annually 3000 lawnmowers and 170,000 brooms for maintenance of bulk plants and service stations alone.

United States Crude Oil Production

Estimates Compiled by THE OIL WEEKLY

DISTRICT OR STATE	Bureau of Mines Recommendation (Daily in Sept.)	ACTUAL PRODUCTION: BARRELS DAILY FOR WEEK ENDING Sept. 26	Sept. 19
TEXAS—			
Texas Panhandle	.....	62,000	61,800
North Texas	.....	61,000	62,000
West Central Texas	.....	27,000	26,700
West Texas	.....	171,000	176,200
East Central Texas	.....	60,500	59,500
*East Texas Field	.....	435,300	434,100
†South Texas	.....	85,000	88,100
†Texas Gulf Coast	.....	253,500	256,400
*Total Texas	1,123,900	1,155,300	1,164,800
OKLAHOMA—			
Oklahoma City	.....	143,500	147,375
Seminole Area	.....	135,725	195,425
Tatums	.....	3,150	3,125
Lucien	.....	12,825	13,100
Fitts	.....	65,150	68,475
Edmond	.....	17,325	16,100
Others	.....	202,900	146,850
Total Oklahoma	563,000	580,575	590,450
KANSAS—			
Ritz-Canton	.....	5,875	5,825
Voshell	.....	2,975	2,900
Nikkel-Hollow	.....	3,800	3,750
Sedgwick	.....	5,225	5,000
Burrton-Haury	.....	14,250	13,900
Lorraine	.....	6,850	6,400
Oxford	.....	3,875	3,825
Others	.....	128,025	123,650
Total Kansas	160,000	170,875	165,250
LOUISIANA—			
North Louisiana	.....	81,000	81,475
Louisiana Gulf Coast	.....	154,500	154,500
Total Louisiana	186,200	235,500	235,975
ARKANSAS	30,500	28,100	28,100
CALIFORNIA—			
Long Beach	.....	66,300	66,500
Santa Fe Springs	.....	43,500	45,500
Huntington Beach	.....	36,200	36,500
Dominguez	.....	26,000	26,500
Inglewood	.....	10,000	11,500
Ventura Avenue	.....	34,000	33,000
Seal Beach	.....	9,500	9,500
Midway-Sunset	.....	55,000	63,500
Elwood	.....	11,000	11,000
Kettleman Hills	.....	78,000	75,000
Mountain View	.....	21,500	22,500
Playa del Rey	.....	11,800	11,500
Others	.....	165,200	167,500
Total California	535,200	568,000	580,000
MOUNTAIN STATES—			
Wyoming	37,200	41,000	41,400
Montana	13,500	18,400	18,300
Colorado	4,500	4,900	5,000
Total Rocky Mountain States	55,200	64,300	64,700
NEW MEXICO	71,600	79,500	78,100
EASTERN STATES	107,100	114,400	114,000
MICHIGAN	31,300	30,000	30,600
*Total United States	2,864,000	3,026,550	3,051,975
*Surreptitiously produced oil in East Texas, not included in above figures, estimated at	.....	15,000	14,500
Grand Total, including surreptitious production	.....	3,041,550	3,066,475

† Coastal section of South Texas is included with Texas Gulf Coast.

Crude Runs to Stills, Stocks of Finished and Unfinished Gasoline and Gas and Fuel Oil, and Cracked Gasoline Production, Week Ended September 19, 1936

Figures in thousands of barrels of 42 gallons each as reported to American Petroleum Institute

DISTRICT	Daily Refining Capacity			Crude Runs to Stills		Stocks of Finished and Unfinished Gasoline				Stocks of Gas and Fuel Oil			Daily Charging Capacity of Cracking Units			Cracked Gasoline Production
						Finished										
	Potential Rate	Reporting		Daily Average	% Operated	At Refineries	Terms. Trans. Pipe Lines	Unfinished in Naphtha Distillates	Total Finished and Unfinished	Gas, Oil & Distillates	Residual Fuel Oil	Total	Potential Rate	Reporting		Daily Average
		Total	%											Total	%	
East Coast	612	612	100.0	528	86.3	5,105	10,125	1,003	16,233	6,965	5,595	12,560	534	534	100.0	104
Appalachian	154	146	94.8	111	76.0	904	996	291	2,191	342	299	641	79	78	98.7	26
Ind., Ill., Ky	462	444	96.1	424	95.5	4,752	2,718	673	8,143	3,438	2,924	6,362	349	348	99.7	130
Okla., Kans., Mo	453	384	84.8	283	73.7	3,080	2,049	482	5,611	1,131	2,372	3,503	256	228	89.1	74
Inland Texas	330	160	48.5	100	62.5	949	74	189	1,212	427	1,308	1,735	148	105	70.9	28
Texas Gulf	732	710	97.0	639	90.0	4,386	310	1,926	6,622	4,854	4,273	9,127	399	393	98.5	150
Louisiana Gulf	169	163	96.4	123	75.5	951	433	243	1,627	1,233	1,090	2,323	77	74	96.1	26
North La.—Ark.	80	72	90.0	42	58.3	152	58	50	260	113	268	381	46	44	95.7	9
Rocky Mountain	97	60	61.9	45	75.0	714	.....	94	808	215	617	832	46	39	84.8	15
California	852	789	92.6	500	63.4	8,257	2,103	1,141	11,501	.....	.....	73,344	280	280	100.0	63
Reported	.....	3,540	89.8	2,795	79.0	29,250	18,866	6,092	54,208	.....	.....	110,808	.....	2,123	95.9	625
Estimated Unreported	.....	401	....	215	....	2,061	639	378	3,078	.....	.....	2,310	.....	91	....	40
*Estimated Total U. S. September 19, 1936	3,941	3,941	....	3,010	....	31,311	19,505	6,470	57,286	.....	.....	113,118	2,214	2,214	....	665
*Estimated Total U. S. September 12, 1936	3,941	3,941	....	3,095	....	32,213	19,287	6,418	57,918	.....	.....	113,109	2,214	2,214	....	700
U.S.B. of M. Sept. 1935	.....	....	....	2,778	....	†27,166	†18,458	†5,710	†51,334	.....	.....	†110,141	.....	....	....	602

*Bureau of Mines basis currently estimated. †As of September 30, 1935.

STOCKS DECLINE
Draw 2,466,000 barrels from storage in week

Stocks of domestic and foreign crude petroleum at the close of the week ending September 12 totaled 298,448,000 barrels, according to data compiled by the Bureau of Mines for Harold L. Ickes, Secretary of the Interior. Compared with the figures of the previous week, this total represents a decrease of 2,340,000 barrels, comprising a decrease of 2,466,000 barrels in stocks of domestic crude but an increase of 126,000 barrels in stocks of foreign crude.

Current reports of the industry for the week ending September 12 indicate that production, imports, and runs to stills increased. The daily average production was about 3,050,000 barrels, an increase of 10,000 barrels over the level of the previous week. Daily average crude runs to stills were about 3,120,000 barrels, the highest figure so far recorded. Daily average imports were 125,000 barrels, the highest since the week ending August 8.

REFINERY ADDITION
Tide Water lets contract for liquefied gas plant

New York.—Due to the increased demand for liquefied petroleum gases, Tide Water Oil Company has placed a contract for the construction of a propane-butane rectification plant, to be installed at its Bayonne, N. J., refinery. This plant will be capable of producing its 45,000 gallons per day of propane and 7500 gallons per day of butane, from refinery gases which could formerly only be used as fuel for the refinery.

Through sales contracts that have been completed Tide Water Oil Company is assured of a market for the products of the new plant. This unit will separate commercial specification propane and butane from refinery gases liquefied in an existing gasoline rectification plant.

Stocks of Crude Petroleum—September 5 and 12, 1936

(Barrels of 42 gallons)

Grade of Crude Oil	September 5	September 12	Change from September 5
Pennsylvania Grade	4,110,000	4,145,000	+ 35,000
Other Appalachian	737,000	786,000	+ 49,000
Lima—N. E. Indiana-Michigan	1,129,000	1,072,000	— 57,000
Illinois—S. W. Indiana	10,092,000	10,086,000	— 6,000
N. Louisiana and Arkansas	10,625,000	10,757,000	+ 132,000
West Texas and S. E. New Mexico	29,450,000	29,418,000	— 32,000
East Texas	21,069,000	20,370,000	— 699,000
Other Mid-Continent	119,514,000	118,829,000	— 685,000
Gulf Coast	27,855,000	27,392,000	— 463,000
Rocky Mountain	25,819,000	25,738,000	— 81,000
California	31,568,000	30,959,000	— 609,000
Foreign	2,395,000	2,521,000	+ 126,000
Total reported weekly	284,363,000	282,073,000	—2,290,000
Estimate of unreported stocks	16,425,000	16,375,000	— 50,000
Total stocks	300,788,000	298,448,000	—2,340,000

WORK EXPEDITED
Italians put 1500 men on refinery job at Trieste

Completion of Aquila, S. A.'s, refinery at Trieste, Italy, designed to handle from 5500 to 7000 barrels of crude per day, will be expedited by augmentation of the force of workers there to about 1500. Dependent upon normally efficient operation, the annual output of the Trieste refinery will be about 2,100,000 barrels of finished products.

The plant reported contemplated for Bari, to operate on heavy Albanian crude oil from Kucciova field, has not passed the drawing board stage, according to reports from Rome. Kucciova crude will be piped about 50 miles to Valona, from which point it will be shipped in tankers to Bari.

CRUDE OIL PRICE QUOTATIONS

(Figures Represent Basic or Flat Prices—Revised to September 25, 1936)

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Oklahoma-Kansas	28-$0 94	2¢	40—$1.18	1- 9-36
N. and N.-C. Texas	28— .84	2¢	40— 1.08	1- 9-36
Texas Panhandle				
Gray County	34— .86	2¢	40— .98	1- 9-36
Carson-Hutchinson	34— .81	2¢	40— .93	1- 9-36
West Texas				
Ector, Pecos, W'kler Crane, Upton, Howard and Glasscock	29— .76	2¢	36— .90	1-14-36
West Central Texas	28— .84	2¢	40— 1.08	1- 9-36
East Central Texas	28— .91	2¢	40— 1.15	1- 9-36
East Texas	*1.15			1- 9-36
Talco	* .60			4-15-36
Texas Gulf Coast				
Anahuac-Dickinson	30— 1.04	2¢	40— 1.24	1- 9-36
Conroe	35— 1.24	2¢	40— 1.34	1- 9-36
Tomball	*1.30			1- 9-36
Cleveland	*1.00			1-11-34
†Goose Creek, Hull Liberty, Orange, Pierce Junction, Moss Bluff, Raccoon Bend, Sour Lake, Spindletop, Sugarland, West Columbia, Humble, Rabbs Ridge	Below 17— .88	2¢	34— 1.22	1- 9-36
South and S. W. Texas	Below			
Refugio (Light)	17— .88	2¢	34— 1.22	1- 9-36
Refugio (Heavy)	*.90			1- 9-36
Saxet	*.90			1- 9-36
Mirando	*.85			1- 9-36
Pettus	*1.25			1- 9-36
Salt Flat	*.97			1-14-36
Darst Creek	*.97			1-14-36
Placedo (Heavy)	*.85			4- -36
Placedo (Light)	*.95			4- -36
Port Lavaca	*.97			
Plymouth	*.90			12-17-35

* All gravities—flat rate.
† Gulf Coast prices as posted by Humble Oil & Refining Company.

DISTRICT	Low Grav.	Dif.	High Grav.	Date
Arkansas				
El Dorado (Light) and Rainbow	25— $.78	2¢	40—$1.10	1-10-36
El Dorado East Field and Smackover	*.75			1-10-36
North Louisiana	25— 0.78	2¢	40— 1.10	1-10-36
Urania	*.97			1-10-36
South Louisiana	Below			
Lockport	19— .92	2¢	34— 1.22	1- 9-36
Iowa Cameron Mds	19— .82	2¢	34— 1.12	1- 9-36
Rocky Mountain States				
Salt Creek	29— .94	2¢	40— 1.18	1-10-36
Elk Basin	*1.18			7-20-36
Grass Creek (Light)	*1.18			7-20-36
Grass Creek (Heavy)	*.58			1- 9-36
Big Muddy	*1.11			1- 9-36
Rock Creek	*1.12			1- 9-36
Sunburst	*1.15			6- 5-36
Lance Creek	*.90			1- 9-36
Osage	*1.08			
Cat Creek	*1.07			8-25-33
Cut Bank	*1.35			6- 3-36
Pondera	*1.05			9-29-33
Hog Back, N. M.	*1.00			9- 8-33
Lea County, N. M.	*.75			9-29-33
Mid-West States				
Lima	*1.15			9-22-36
Illinois	*1.23			1- 9-36
Princeton	*1.23			1- 9-36
Western Kentucky	*1.23			1- 9-36
Pennsylvania				
Bradford	*2.45			1-13-36
Sw. Pa. Pipe Line	*2.17			1-13-36
Eureka Pipe Line	*2.12			1-13-36
Buckeye Pipe Line	*1.97			1-13-36
Corning Grade	*1.32			9-18-36
Michigan				
Central Michigan	*1.32			9-16-36
Muskegon	*.70-1.00			12-31-32
Canada				
Petrolia	*2.10			9- 9-33
Oil Springs	*2.17			9- 9-33

* All gravities—flat rate.
‡ Average price, all oil sales being to small refineries.

MAJOR PRICE CHANGES

	Penna. (Nat. Tr.)	Mid.-Cont. (35 Gr.)	Calif. (26 Gr.)
June 19, 1933	Up 10	Up 19	.....
June 26, 1933	Up 10	.....	Up 9-12
July 6, 1933	Up 13	Up 10	.....
July 17, 1933	Up 15	.....	.....
July 28, 1933	Up 15	.....	.....
August 11, 1933	Up 10	.....	.....
August 24, 1933	.....	Up 10	.....
August 30, 1933	Up 15	.....	.....
September 6, 1933	Up 10	Up 10	Up 15
September 8, 1933	.....	Up 15	.....
May 1, 1934	Up 10	.....	.....
November 6, 1934	Cut 25	.....	.....
December 6, 1934	Cut 25	.....	.....
January 4, 1935	Up 15	.....	.....
February 4, 1935	Up 15	.....	.....
May 16, 1935	Cut 15	.....	.....
June 26, 1935	Cut 15	.....	.....
July 16, 1935	Cut 10	.....	.....
August 29, 1935	.....	.....	Cut °4
September 6, 1935	Up 5	.....	.....
October 29, 1935	Up 15	.....	.....
November 1, 1935	.....	.....	Up °28
November 18, 1935	Up 15	.....	.....
December 6, 1935	.....	.....	Up °9
January 9, 1936	.....	Up 10	.....
January 13, 1936	Up 15	.....	.....
February 26, 1936	.....	.....	Up '5

CRUDE PRODUCTION TAXES

Oklahoma—Five percent of gross value less royalty interest.

TEXAS—Two cents or 2 percent, whichever is higher.

Louisiana—From four to 11 cents a barrel, depending upon gravity.

Arkansas—2.6 percent of gross market values.

Montana—Two percent of gross value at well and ⅜ of 1c per barrel.

Wyoming and New Mexico—Production tax based upon state and county assessments.

California—.66443 mills per barrel of oil produced and 17.39 cents per acre on proved oil lands.

* All gravities—flat rate.
° Signal Hill 26 gravity.
' Seal Beach 26 gravity.

CALIFORNIA OIL PRICES

(All gravities above those quoted take highest prices of that field. Effective February 26, 1936)

Gravity	Signal Hill	Seal Beach Alamitos Heights	Huntington Beach	Inglewood	Playa Del Rey	Olinda Brea Canyon	Athens Rosecrans	Elwood Terrace	Torrance	Richfield	Whittier East Coyote La Habra	Montebello	West Coyote Hills	Santa Fe Springs	New Hall McKittrick Kern River Round Mountain	Mountain View	Midway-Sunset Buena Vista Hills Elk Hills	Lost Hills	Coalinga	Wheeler Ridge
14-14.9	$.80	$.79	$.78	$.79	$.80	$.76	.....	.....	$.80	$.76	$.76	$.77	$.78	.....	$.70	.....	$.70	$.78	$.70	.....
15-15.9	.80	.79	.78	.79	.80	.76	.....	.....	.80	.76	.76	.77	.78	.....	.70	.....	.70	.70	.70	.....
16-16.9	.80	.79	.78	.79	.80	.76	.....	.....	.80	.76	.76	.77	.78	.....	.70	.....	.70	.70	.70	.....
17-17.9	.80	.79	.78	.81	.80	.76	.....	.....	.80	.76	.76	.77	.78	.....	.70	.....	.70	.70	.70	.....
18-18.9	.80	.79	.78	.84	.80	.78	.....	.....	.82	.76	.76	.77	.78	.....	.70	.....	.70	.70	.70	.....
19-19.9	.82	.79	.82	.87	.84	.81	.....	.....	.85	.76	.78	.77	.78	.....	.70	$.70	.74	.74	.71	$.70
20-20.9	.85	.79	.85	.90	.88	.84	.....	.....	.88	.78	.82	.77	.80	.....	.....	.70	.78	.78	.72	.70
21-21.9	.88	.79	.89	.93	.93	.88	.....	.....	.91	.80	.85	.77	.84	.78	.....	.73	.82	.82	.74	.70
22-22.9	.92	.82	.92	.96	.98	.92	.....	.....	.93	.84	.89	.79	.88	.78	.....	.77	.87	.86	.78	.72
23-23.9	.95	.86	.96	.99	1.02	.96	$.84	.....	.96	.88	.93	.82	.92	.78	.....	.80	.92	.90	.82	.76
24-24.9	.99	.91	1.00	1.02	1.06	.99	.88	.....	.99	.91	.96	.85	.96	.82	.....	.84	.97	.94	.86	.79
25-25.9	1.03	.95	1.03	1.05	1.11	1.03	.93	.....	1.02	.95	.....	.89	.99	.86	.....	.88	1.01	.98	.90	.83
26-26.9	1.06	1.00	1.07	1.09	1.16	1.06	.98	.....	1.05	.98	.....	.92	1.03	.90	.....	.91	1.06	1.02	.....	.....
27-27.9	1.10	1.05	1.11	1.12	.....	1.10	1.03	.....	.....	1.02	.....	.96	1.06	.95	.....	.95	1.10	1.06	.....	.....
28-28.9	1.14	1.10	1.14	1.15	.....	1.14	1.07	.....	.....	1.06	.....	.99	1.10	.99	.....	.99	1.15	1.10	.....	.....
29-29.9	1.17	1.15	1.18	1.18	F.O.B.	1.17	1.12	.....	.....	1.09	.....	1.03	1.14	1.03	.....	1.02	1.20	1.14	.....	.....
30-30.9	1.21	1.19	1.22	1.21	Pipe	1.21	1.17	F.O.B.	.....	.....	.....	1.07	1.17	1.08	.....	1.06	1.25	1.18	.....	.....
31-31.9	....	....	.....	1.24	Line	1.24	1.22	Ship	Kettleman Hills			1.11	1.21	1.12	.....	1.09	1.29	.....	.....	.....
32-32.9	....	....	.....	1.27	....	1.27	1.27	.....				1.14	1.25	1.16	.....	1.13	1.34	.....	.....	.....
33-33.9	....	....	....	....	....	....	1.32	$1.28		1.19		1.18	1.28	1.20	.....	1.17	1.38	.....	.....	.....
34-34.9	....	....	....	....	....	....	1.37	1.32	....	1.23	....	1.22	1.32	1.25	.....	1.20	.....	....	....	....
35-35.9	....	....	....	....	....	....	1.42	1.35	....	1.27	....	1.25	....	1.29	.....	.....	.....	....	....	....
36-36.9	....	....	....	....	....	....	1.46	1.39	....	1.31	....	1.29	....	1.33	.....	.....	.....	....	....	....
37-37.9	....	....	....	....	....	....	1.51	1.43	....	1.35	....	1.32	....	1.37	.....	.....	.....	....	....	....
38-38.9	....	....	....	....	....	....	1.56	....	....	1.39	....	1.36	....	1.42	.....	.....	.....	....	....	....
39-39.9	....	....	....	....	....	....	1.61	....	....	1.43	....	1.40	....	.....	.....	.....	.....	....	....	....
40-40.9	....	....	....	....	....	....	1.66	....	....	....	....	1.43	....	.....	.....	.....	.....	....	....	....

Will Drill

RIACHO DOCE PROSPECT IN BRAZIL TO BE TESTED

Following preliminary geological work on the Riacho Doce prospect in the State of Alagoas, Brazil, near Maceio, the capital (THE OIL WEEKLY, May 13, 1936), Messrs. Piepmeyer & Company of Cassel, Germany, have definitely recommended that the Brazilian government proceed with drilling.

The recently made recommendation is based on the following findings: (a) presence of sedimentary strata determined to 1000 meters; (b) existence within the sedimentary strata of a structural disturbance closely connected with an elevation of crystal rock having on both sides extensive zones with indications of methane gas; (c) the undulating character of the crystal surface indicates a possibility of encountering formations favorable to accumulation in the sedimentary strata, the age of which is Tertiary Eocene.

Information from Maceio is that while the Piepmeyer concern has recommended drilling the Riacho Doce prospect it is not likely to take charge of that phase of the work itself. Companhia Petroleo Nacional holds the Riacho Doce concession.

Thirty kilometers northwest of Riacho Doce prospect, citizens have reported indications of oil in Rio Largo. The Piepmeyer organization may get the contract from the Brazilian government to do preliminary geological and geophysical work on this prospect, too.

PERSIAN GULF

Iraq Petroleum will be more active in area

Advices from London hold that recent formation of Petroleum Development, Limited, with a registered capitalization of £100,000 English sterling, is indicative of further activity of Iraq Petroleum Company in the Persian Gulf country.

The new organization is an affiliate of Petroleum Concessions, Limited, which is the subsidiary of Iraq Petroleum Company, Limited, that obtained in 1935 the *Qatar* concession covering the penninsula to the southeast of Bahrein Islands.

In addition to the above foreshadow of activity, plus that already well underway at Bahrein and at Damman by the development subsidiary of The Texas Company and Standard Oil Company of California, it is contemplated Petroleum Concessions, Limited, will form shortly a new subsidiary for exploration and exploitation of another recently obtained concession covering the Saudi Arabian Coast of the Red Sea.

With reference to the California Texas Oil Company's production development work at Damman, dependent upon development of sufficient commercial production there to warrant same, a line probably will be built from the field northward around the town of *Qatif* to a point called Ras Tanura, where the customary shoal water of the Persian Gulf gives way to a channel of deep water coming close enough to the land to make a tanker terminal feasible.

NEW REFINERY

Company is organized to operate on S. A. crude

A firm with Brazilian and Uruguayan capital amounting to 18,000 contos, or approximately $1,062,000 in U. S. currency, recently organized under the name of Ypiranga, S. A., Companhia Brasilera de Petroleo for the purpose of refining and distributing petroleum products around Rio Grande, Brazil, according to A. A. Barrington of Rio de Janeiro.

Present plans of the organization are to use crude oil from Peruvian fields and those located along South America's western coast.

ALCOHOL LOSING OUT

Use of methanol as motor fuel growing in Germany

Compulsory use of ethyl alcohol as a motor fuel constituent in Germany may be abandoned soon due to the increasing and compulsory use of methanol, coupled with the heavier output of synthetic gasoline and the growing shortage of animal feedstuffs.

Late in 1935, all light motor fuels burned in Germany contained 10 percent ethyl alcohol, according to the law. January 1, 1936, the legal requirement was reduced to 9 percent, and June 1 it was cut to 8 percent. Both these decreases, as well as one of August 1, provided for increased use of methanol as a motor fuel constituent.

It is estimated the present trend in Germany against ethyl alcohol and toward methanol, so far as motor fuels are concerned, will result in consumption there of 80,000 metric tons of methanol in 1936, largely because use of the latter in connection with manufacture of gasoline from brown coal is expanding.

OIL EXTRACTION

Machine will wash crude from sands at low cost

Abasand Oils, Limited, organized to develop oil and asphalt containing sands on a concession in Alberta, Canada, is reported to have acquired a machine for extracting oil from the sands. It is claimed the machine, developed at a cost of $125,000, will extract oil from the river sands at a cost of 50 cents per barrel.

According to George C. Cobb of Kingston, Canada, sand from the banks and cliffs of the river enters the machine through a hopper. It is mixed with hot water and washed thoroughly a number of times. Eventually the oil pours out of one vent and the sand and water out of another. The machine is electrically driven by a 10 horsepower motor and requires only two men to operate it. Cobb states it will be placed on a movable chasis and pushed up against the face of the sand cliffs for operation.

WILDCATS PROCEED

Tyler. — The southwestern Fannin County wildcat, Carter, Abernathy & Stevens' G. D. Galloway 1, W. M. Rice Survey, one mile south of Leonard, late last week was coring ahead at 2690 feet after having encountered sand at 2683-2690 feet that the operators believed had some gas in the top, although no oil or gas was in evidence in the lower part of the core.

Fast progress has been made on the recently spudded Navarro County wildcat, P. S. Groginski's S. P. Love 1, located three and a half miles southwest of Corsicana, in the Richard Goad Survey. Late last week the well was drilling chalk and shale at 1500 feet after having logged top of the Austin chalk at 1157 feet, surface elevation being 422 feet. The wildcat is scheduled to go to about 4500 feet so as to test the Trinity as well as the Woodbine. Meanwhile, materials are being moved in for the drilling of another Navarro County Trinity test, the Etta Black 1 of Calto Oil Company, which is headed by E. B. Germany of Dallas. The Calto location is in the B. G. Balthorp Survey, about two miles southwest of Bazette.

7 MEXICO PERMITS

Mexico City, Mex.—Permits to drill 9 wells in Vera Cruz and Tamaulipas states have been granted by the ministry of national economy as follows:

Petromex, Petromex 32 and 33, Poza Rica zone, Cocetazintla municipality; Richmond Petroleum Company, Cuichapa 5, 6 and 7, Monoaclan municipality; and Globe Petroleum Company, Quebrache 3, Quebrache municipality, Tampico Alto, all in Vera Cruz; Hamilton & Devine, S. en C., Delgado 5 and 6, Altamira municipality, Tamaulipas, and Metlac Petroleum Company, Metlaltoyuca 1, Metlaltoyuca municipality, Puebla state.

STOCKS DOWN

Los Angeles.—During the month of August, stocks of crude oil and other petroleum products in California showed a net decline of 850,927 barrels, according to A.P.I. figures. Heavy crude oil, including fuels, increased 740,000 barrels, and light refinable crudes were reduced 1,294,000 barrels. Gasoline stocks were off 95,000 barrels. Ninety-nine wells were completed for the month, 30 of which were dry holes.

Edmond Completions

WATER AND SAND GIVE TWO NEW WELLS SOME TROUBLE

WEEKLY STAFF REPORT

Oklahoma City.—One of the most troublesome wells in the Crescent pool of Logan County, Carter Oil Company and Gulf Oil Corporation's Miller 2, SW NE SE 28-17n-4w, which apparently had been drilled too deep in the Wilcox sand, and had to be plugged back to shut off water intrusion, came into production last week, flowing 1934 barrels of oil in 15 hours. Operators cemented 6⅝-inch liner at 6222 feet, and the well was opened and washed in through tubing. It averaged 145 barrels of oil per hour. It was later choked with 850 pounds pressure on the casing, and flowed 165 barrels of oil per hour through tubing wide open. The pressure was cut to 400 pounds on the tubing and the well cut 10 percent. Later in the week, the well flowed 165 barrels of oil and 58 barrels of water per hour from a depth of 6222 feet.

Mid-Continent Petroleum Corporation's Campbell 4, SW SE NE 33-17n-4w, flowed 709 barrels of oil in 3 hours and 4 minutes on the potential test. The well sanded up and the separator and flow lines were cleaned out by the crew before another test could be taken. On the second test, the well flowed 518 barrels of oil in 20 minutes, 270 barrels during the last 10 minutes, but was making lots of sand and about 40,000,000 cubic feet of gas. It was finally shut down to make a complete change in connections to care for the heavy sand flow.

The Texas Company's Denny 4, NW NE SE 33-17n-4w, flowed 1310 barrels of oil in 24 hours, while drilling in under pressure. It was drilling to 6227 feet in hard Wilcox sand. Top of the second Wilcox was had at 6185 feet. Earlier in the week, the well showed promise of being a good producer when it headed up and flowed 100 barrels of oil in 30 minutes. At that time it had drilled to 6196 feet, just below the top of the second Wilcox. Later reports from the field state the well established a potential of 1270 barrels of oil in 24 hours.

Sinclair Prairie Oil Company's Phillips 2, SEc NW 28-17n-4w, topped the first Wilcox sand at 6506 feet, and cored from 6518 to 6525 feet, and had a show of oil. A second core taken from 6527 to 6537 feet had a good show of gas. Operators were laying down drill pipe and preparing to run an electrical well-logging device.

Latest producer for the Moore pool of Cleveland County is Sinclair Prairie Oil Company's Fant 1, NWc 27-10n-2w, which was opened for three hours and made 428 barrels of oil the first hour and 30,900,000 cubic feet of gas. It made 377 barrels the second hour with 25,900,000 cubic feet of gas, and 350 barrels of oil and 23,210,000 cubic feet of gas the third hour. The well was shut in. Pressure increased from 1750 to 2050 pounds.

Anderson-Prichard Oil Company's State 1, SWc SE 16-10n-2w, was shot with 300 quarts from 7211 to 7235 feet, and opened for 15 minutes. The gas flow was increased to an estimated 100,000,000 cubic feet, accompanied by lots of sand, which later cut the connections.

In the Oklahoma City oil field, attention was centered on Knox Garvin's Woodbridge 1, in Howes Capitol Addition, one block south of the University Hospital, which had an appreciable increase in production. The well was completed only a week ago for a potential of 5324 barrels of oil at 6402 feet, but was drilled ahead to 6423 feet and was flowing an estimated 175 barrels of oil per hour and 18,500,000 cubic feet of gas daily with drill pipe still in the hole.

The potential gauge at British American Oil Producing Company's Culbertson 1, at Northeast Twenty-First Street and Kelley Avenue, was delayed until pipe line connections could be made. On the last test, the well flowed 425 barrels of oil the first hour with drill pipe out of the hole. Gas was estimated at 12,000,000 cubic feet. A later potential flow was 12,035 barrels of oil and 14,000,000 cubic feet of gas, from a depth of 6418 feet. During the latter part of the week, the well raised its daily potential to 6016 barrels.

Ohio Oil Company was killing the oil and water flow at Pettigrew 1, SW SE SE 8-13s-3w, at the north edge of the Britton field in Oklahoma County. Brine cutting at the well had reached approximately 75 percent of the flow. The hole is to be plugged back a second time to shut off the flow of water. Present total depth is 6652 feet, and on the last test, the well made 647 barrels of oil with a trace of water in 24 hours.

In the Edmond field, Ohio Oil Company made location for a new well, the F. E. Johnson 1, SEc 25-14n-4w, just west of the field. Continental Oil Company was preparing to deepen Young 11, NE SW NW 31-14n-3w, after it showed for 200 barrels of oil and 1,500,000 cubic feet of gas at 6610 feet in lime.

Tussey Extensions

AREA APPARENTLY EXTENDS INTO CARTER COUNTY

Ardmore.—The possible extension of the Tussy area into Carter County, the testing of another deep well in the multiple-sand Cement field, and the coring of saturated formations in the second deep test in the Fox field were outstanding in South Oklahoma developments last week.

Opened during the latter part of August, the North Tussy area of southwestern Garvin County is due for a definite extension across the line into northwestern Carter County, thus creating another "two-county" pool. Skelly Oil Company's Wood 1, NWc 4-1s-3w, in Carter County, just across the line, had a good show of oil at 2343 feet to 2345 feet and is drilling ahead to the Tatums sand, expected around 2630 to 2670 feet.

Winkler & McQueen's Davis 2, NE SE SE 32-1n-3w, was drilling in sand at 1150 feet, while Davis 1, SEc 32-1n-3w, the discovery well of the area, was averaging 230 barrels of oil daily through tubing.

In the Cement pool of Caddo County, Ohio Oil Company and Ramsey Petroleum Corporation's Wade 10, NW NE SW 2-5n-9w, was still being tested. Gas flow ranged from 1,500,000 cubic feet to more than 2,000,000 cubic feet, with some mud and oil. It made a few head flows, each lasting five or six minutes, and each having a little oil. It was drilled to 6854 feet, and was bailing near the bottom, lowering the fluid slowly. A new sand was encountered between 6805 and 6829 feet. Testing was continuing, with some water in the hole. The well is being alternately shut in and opened up, hoping that enough pressure can be built up to enable the well to clean itself out. It is flowing an average of 25 barrels of oil daily, with about 1,000,000 cubic feet of gas.

In Carter County, Gulf Oil Corporation's Johnson 8, C SW SW 28-2s-3w, interesting deep test in the Fox pool, continued to show signs of being a producer. A two-foot core from between 7403 and 7406 feet was saturated

with oil and showed some gas. It is believed to be in the Hunton lime.

The Texas Company's Cathey 1-B, SW NE NE 6-5s-1w, southeast of Hewitt, drilled to 4559 feet and plugged back to 4375 feet, where it was acidized with 1000 gallons. Operators recovered 135 barrels of the oil load, and the well began producing and flowed 90 barrels of oil in 19 hours, making a total of 255 barrels of free oil. Operators were pulling and re-running rods.

Carter Oil Company's Davidson 1, C NW SW 2-9n-25w, north of Erick in Beckham County, was given 100 perforations from 3391 to 3530 feet, and made 1,892,000 cubic feet of gas. It is to be acidized with 2000 gallons.

Gulf Oil Corporation may renew operations at Wearmouth 1, SE NW SE 31-1s-18w, near Frederick in Tillman County. Operators were unable to plug back recently from the total depth of 5127 feet and test the showing had in upper horizons.

A. H. Jackman et al's Fee 1, SWc 27-1s-24w, near El Dorado Springs, in northwestern Jackson County, has reached the contract depth of 3000 feet, but may be carried ahead.

57 LOCATIONS

Tulsa.—First reports for Oklahoma reached a total of 57 during the past week, an increase of 21 over the total of 36 reported during the previous week. Development looks to be greatest in Pontotoc County, which reported 17 starts. Muskogee and Okfuskee counties each had 5, and 3 were reported from Marshall, Oklahoma, Osage and Seminole counties. Stephens, Kiowa and Carter each had 2. There was 1 each for Atoka, Beckham, Caddo, Cleveland, Creek, Garvin, Grady, Jackson, Kay, Okmulgee, Pottawatomie and Tulsa counties.

Seventy completions were split up between 49 oil wells with an initial production of 205,509 barrels of oil; 3 gas wells with a production of 10,000,000 cubic feet; 15 dry holes, and 3 abandoned locations.

BOOSTER STATION

Ponca City.—Continental Oil Company has announced plans for construction of a new booster station to handle production from the Edmond field. The station will be seven miles east of Edmond at the end of a 10-mile pipe line which connects near Edmond with the company's line from Oklahoma City to Ponca City. The project will also include an 80,000-barrel storage tank.

Tulsa.—Two special courses on the petroleum industry and law of oil and gas are to be offered by the Tulsa public evening schools this fall. This will be the thirteenth annual session of the lecture courses, and will be in charge of Samuel H. Glassmire, attorney, who has conducted the entire series. There will be 24 lectures covering the industry, and occurring twice a week, on Monday and Thursday, from 7:30 until 8:30 p.m., September 21 to December 14.

OKLAHOMA

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CARTER COUNTY—		
Cox & Hammon, Wesley 27, sw nw sw 3-4s-3w	5	990
Shell, Happwood 15, sw sw sw 3-4s-3w (pb 1050)	*	1130
Pure Oil, Westheimer & Daube 22, ne ne ne 9-4s-3w	14	1114
Carter et al, Voorhees 1, cse sw 34-5s-2w	*	8648
CLEVELAND COUNTY—		
Gulf Oil, James 1, nw nw sw 27-10n-2w	¶70-33,595	7262
CREEK COUNTY—		
Sinclair Prairie, Gilcrease 11, csw se 33-17n-11e	350	2278
Collins & Gutelius, C. Hardridge 1, nw se nw 13-14n-10e	*	3245
Sinclair Prairie, Ella Jones 14, sw sw nw 3-17n-7e	15	2599
Shibley Oil, Timothy 3, csw nw 13-17n-7e	35	2005
E. J. Koury et al, J. F. Bruce 1, sw sw sw 15-17n-9e	10	1326
L. Abraham et al, Dickson 1-A, ne se ne 24-17n-9e	12	2315
J. W. Merritt et al, W. B. Pine 9, cne ne 27-18n-8e	*	1367
HUGHES COUNTY—		
Blackwell O&G, Fream 1, se ne nw 29-9n-7e	*	3474
JACKSON COUNTY—		
Burnham's Oliver 1, nw nw se 26-1n-20w	*	2368
KAY COUNTY—		
Shell & Continental, Briddle 2, nw ne sw 5-28n-1w (otd 2368) (pb 2783)	187	2790
LOGAN COUNTY—		
Carter & Gulf, Walker 3, nw ne ne 33-17n-4w	¶80-64,679	6291
MUSKOGEE COUNTY—		
Beard et al, Berry 2, se sw sw 3-13n-16e	30	1761
McComic, Kimmey 1, cse ne 13-15n-17e	*	1186
NOBLE COUNTY—		
Stanolind-Amerada, Gillham 1, ne se se 14-22n-1e	*	4669

L. C. Irwin, drilling superintendent for E. H. Moore, Inc., in the Fitts area. Irwin, as a driller, was a member of the crew that brought in Fitts' first oil producer from Hunton lime, September 6, 1933.

Company, Well and Location	Init. Prod. Bbls.	Depth
OKFUSKEE COUNTY—		
Grimes, Harjo 1-A, nw ne se 36-11n-9e	7	1516
Manahan Oil, Dolton 11, se se sw 36-10n-8e	115	1723
Arkansas Royalty, McIntosh 2, sw nw ne 19-10n-9e	24	1863
Manahan Oil, Scholtz 2, nw se nw 31-10n-9e	150	1766
OKLAHOMA COUNTY—		
Turman Oil, Francis 1, se se sw 22-12n-3w	6100	6508
Clark & Company, Cooke 1, nw nw nw 23-12n-3w	1820	6488
Sunray Oil, State 8, ne nw ne 27-12n-3w	¶19-15,294	6417
Slick-Urschel, Suneram 4, nw sw ne 6-13n-3w	¶18½-8817	6690
Slick-Urschel et al, Owens 2, ne ne se 19-13n-3w	¶4-4062	6715
Pure Oil, Malm 10, ne se sw 30-14n-3w	¶36-23,854	6586
OKMULGEE COUNTY—		
Claypool et al, Derisaw 1-A, ne sw se 14-14n-12e	*	lcn.
Simons & Gordan, Bradford 4, csl se sw 19-14n-14e (otd 1341)	*	1990
C. Miller, Roberts 1, ne sw nw 33-15n-13e	*	1553
Downing, Colbert 7-A, ce½ w½ nw 1-15n-14e	8	1360
OSAGE COUNTY—		
Simmons & Stoner Bros., 17, ne se nw 7-21n-9e	25	532
Ohio Osage Oil, 11, sw ne nw 34-21n-9e	7	1129
Lewis & Continental, Mullendore 15, ne sw sw 16-24n-7e	216	2702
H. F. Worley et al, Cook 6, nw se sw 16-25n-6e	*	lcn.
I.T.I.O, 36, ne ne ne 36-25n-9e	1	2014
Lewis Prod., Callahan 6, ne sw sw 23-26n-6e	1418	2932
Skelly, Smith 6, ne sw nw 26-26n-6e	549	2930
Kewanee O&G, Renald 8, sw ne sw 26-26n-6e	1472	2923
PAWNEE COUNTY—		
Ray Ranger et al, Dale 1, sw se se 13-22n-2e	57	4465
Stanley Brewer, Cotton 11, cnl se sw 6-20n-8e	*	lcn.
PONTOTOC COUNTY—		
Delaney, Hennigan 1, cne 8-2n-6e	*	945
Fleetborn, Morin 3-A, se sw se 20-2n-7e	3340	3793
Amerada, Woolley 2, sw se se 21-2n-7e	7200	3784
Moore, Moody 2, ne nw nw 26-2n-7e	2266	4280
Bishop Oil, Simpson 5, nw nw nw 28-2n-7e	2088	4290
Magnolia, Simpson 3, se se ne 29-2n-7e (pb 4165)	1386	4285
Simpson 12, ne ne ne 29-2n-7e	2115	4320
Blackstock, D. Hardin 3-A, sw se nw 30-2n-7e	4296	3646
Deep Rock, Hardin 8, se se ne 30-2n-7e	2448	3637
Magnolia, D. Hardin 5, se nw ne 30-2n-7e	¶2¼-3576	3800
Carter Oil, Smith 7, sw ne ne 31-2n-7e	3541	4350
Smith 8, nw ne ne 31-2n-7e	4268	4357
Moore, Patrick 4-A, se nw ne 31-2n-7e	4350	4418
SEMINOLE COUNTY—		
Fleetborn, Fleet 1-A, sw sw ne 12-5n-7e	201	4315
Tom Phillips & Kimraw Drlg., Cheparney 1, se se nw 7-6n-7e (pb 2239)	*	4085
Winona Oil, Wolf 2, se sw se 18-7n-8e	¶7	3260
Mid-Continent, McDaniel 2, ne se sw 7-9n-6e	*	4523
Deep Rock, Hagler 4, sw ne ne 19-9n-7e (pb 4130)	60	4133
The Texas Co., Steward 3, se se ne 19-9n-7e	*	4367
Grisso 1, sw sw nw 16-9n-7e	812	3459
Delaney et al, Knappenberger 1, ne ne sw 20-9n-7e (pb 3489)	*	3503
Amerada et al, M. Pyle 1, nw nw se 3-10n-5e	126	4939
Gulf, Scott Fife 2, ce½ ne nw 11-10n-6e (otd 4172)	425	4190
Amerada-Stanolind, J. McGirt 1, nw nw se 31-9n-9e	68	4082
STEPHENS COUNTY—		
Raizen Bros., Price 3, sw se sw 10-3s-5w	15	1450
TULSA COUNTY—		
Swift Bros., Anthis 2, nw sw sw 13-19n-10e	¶1½	1810
Tidewater Oil, 1, csl ne se 14-19n-10e	¶1½	1810

*Failures; †Junked; ¶Million cu. ft. gas.

FITTS ACTIVE

Explore east extension to Hunton lime area

Tulsa.—Prolonged rain has caused an extensive revival of drilling throughout the Mid-Continent field, and as usual in Oklahoma, the heaviest activity has centered in the Fitts field of Pontotoc County. Word from that section of the Sooner state is that the east extension of the Hunton lime zone of the field will continue to be explored in an effort to determine the boundaries. E. H. Moore et al's Deaner 1, NW SW SE 23-2n-7e, was the first location to be made in an effort to prove up the edges of the sector. It is northwest of a failure drilled by Pasty Oil Company, Marcum and others.

Skelly Oil Company's Park College 15, SE NW NE 28-2n-7e, is a new Hunton lime producer. It had lime from 3335 to 3635 feet. After being acidized with 7000 gallons, the well was opened and made 250 barrels of oil the first hour; 246 barrels the second hour; 210 barrels the third hour, and 197 barrels the fourth hour, accompanied by 3,750,000 cubic feet of gas.

Magnolia Petroleum Company's Statler 3, SEc SW 28-2n-7e, which had geologists perplexed last week, has been designated as drilling in what is known as the Oil Creek formation. Several authorities believed the cuttings previously found in the well were Wilcox sand, but later agreed they were from the Oil Creek formation. Statler 3 found the sand at 4631 feet, and circulated 200 barrels of oil, but the well failed to flow. The swab was later lost in the hole. After recovering the fish, operators bailed down 3950 feet, but the well still refused to flow.

Another producer for the field is J. E. Crosbie's Harden 3-B, NE SW NE 20-2n-7e, which flowed 394 barrels of oil in one hour through casing after being acidized with 10,000 gallons. The Hunton lime was topped at 3420 feet, and the Sylvan shale at 3627 feet. It was shut in to take potential.

E. H. Moore et al's Benton 1-A, NW NE NW 32-2n-7e, drilled to 4405 feet in the Wilcox sand and flowed 758 barrels of oil the first hour through casing. Operators ran tubing and the well established a potential of 4482 barrels of oil in 24 hours with 1,500,000 cubic feet of gas.

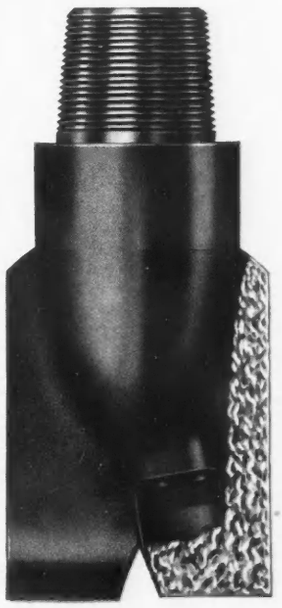
Fleetborn Drilling Company's Morin 4-A, SWc SE 20-2n-7e, on the north edge of the field, during a three-hour test flowed 138 barrels the first hour, 95 barrels the second hour, and 58 barrels the third hour. It was drilled to 3773 feet in the Hunton lime, and was acidized with 10,000 gallons.

A check of the field reveals a potential of 837.169 barrels of oil from 355 Upper Simpson wells, and 77 Hunton lime wells each have a daily allowable of 79 barrels of oil, with no estimate on potentials. Twenty-three wells in the Wilcox zone have a potential of 96,007 barrels of oil. Ten wells in the Jesse pool have a potential of 46,684 barrels of oil. Potential for the two areas is estimated at more than 1,000,000 barrels of oil.

In Lincoln County, Skelly Oil Company's Sporn 1, NW NE SW 21-17n-3e, the wild gasser south of Perkins, had a new steel derrick on the ground to replace the one which was wrecked last week by the huge head of gas which blew in from the Wilcox sand. The well is to be carried ahead.

Carter Oil Company's Robert Hully 1,

MORE HOLE . . . IN LESS TIME . . . FOR LESS MONEY



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CE¼ NE SE 15-10n-6e, in the Keokuk pool of Seminole County, drilled to 3248 feet in the Misener sand and took a swabbing potential of 245 barrels of oil through tubing. Operators were to take a pumping potential also.

The same company's Aldridge 5, N½ NW NE 35-11n-6e, was completed in the Misener sand between 4158 and 4159 feet, and swabbed 336 barrels of oil through tubing. It will be given a pumping potential.

In the Burbank field of Osage County, Kewanee Oil & Gas Company's Alfred 1, NW SW NE 26-26n-6e, is a new Bartlesville sand producer from between 2835 and 2899 feet. The well started showing oil with a trace of water, but the water was later exhausted. The hole was cleaned out and flowed 275 barrels of oil in 24 hours. It is to be shot.

Glen Dial et al's Kolb 1, NEc SW 28-20n-2w, in the Lucien pool of Noble County, ran tubing to 5131 feet after the well flowed 550 barrels of oil a day from the first Wilcox sand. From 5030 to 5092 feet, the well established a potential of 1150 barrels of oil.

In the same area, Sinclair Prairie Oil Company's Kreithe 2, SWc NE 28-20n-2w, had drilled to 5140 feet, 37 feet into the first Wilcox sand. The well began flowing about 75 barrels of oil daily, but following a shot with 70 quarts, made a 24-hour flow of 170 barrels. It is at a total depth of 6158 feet in the Wilcox.

Skelly Oil Company's Smith 6, NE SW NW 26-26n-6e, in the Burbank pool of Osage County, had the pay from 2841 to 2930 feet, and made 1297 barrels of oil natural on a 24-hour potential test.

In the Clarita area of Coal County, Continental Oil Company's Breedlove 1, NW SW SW 24-1n-8e, had a show of oil from 2495 to 2480 feet, and was coring ahead at 2510 feet. The same company's King 1, NE SW NE 26-1n-8e, cored to 4122 feet, but had no show. It was being drilled ahead below 4150 feet.

Ellis Area Strike

TWELFTH FIELD FOR COUNTY OPENED BY GOOD WELL

KANSAS

WEEKLY STAFF REPORT

Wichita.—The twelfth new oil pool for Ellis County was the center of interest in the Sunflower state last week. Bradley Oil Company et al's Penny Wann 1, SEc 13-15s-20w, 16 miles southwest of Hays, struck the pay in the basal conglomerate September 22, following which the well filled 600 feet with oil. The tools were pulled from the hole at 3657 feet in sand topped at 3653 feet. The first oil was believed to have been encountered at 3655 feet, although the tools were two hours reaching the present depth because of the hardness of the formation. The hole filled 1100 feet during the first three hours, and continued to rise. Penny Wann 1, is six miles from the nearest production, and is said to be the third well in Ellis County to find production in the basal formation. Initial potential was 1557 barrels.

Another good producer in the same county was Margay Oil Company's Bemis 2-A, NE SE SE 16-11s-17w, in the Bemis pool, which on a potential retake pumped 2893 barrels of oil natural. Production is from the Siliceous lime between 3361 and 3375 feet. It is believed to be the largest pumping well in this part of the state.

The same company's Bemis 2-B, NWc SE SW 17-11s-17w, on a retake had a potential of 2630 barrels of oil daily from between 3408 and 3423 feet in the pay. Its Bemis 3-A, SWc 16-11s-17w, was completed at 3331½ feet for a potential of 1665 barrels of oil.

In Reno County, operators were looking for a possible extension of the Lerado pool, in Empire Oil & Refining Company's Mauck 1, NE SE NW 15-26s-9w. Successful completion of this well will do much to prove up acreage on the west side of the field. Mauck 1 topped the Viola lime at 4142 feet, and after drilling to 4143½ feet, took a core that was found to be saturated with oil. Standard tools are being rigged up before drilling in.

Russell County continued to be the most active in the state. Hartman & Blair's Roubach 4, SW SE NW 2-14s-15w, in the Sullivan pool, which blew in wild two weeks ago from the Lansing lime, has been brought under control. Oil was flowing at the rate of 750 barrels per hour from 3040 feet, was killed and six-inch casing run, preparatory to drilling plugs late this week. The pay zone was from 3031 feet to 3055 feet. The oil is 38 gravity, similar to that found in Roubach 1, completed 18 months ago for 4076 barrels. It is still producing around 3000 barrels daily.

National Refining Company's Harbaugh 3, NW SW SE 25-14s-15w, in the Harbaugh pool, has been completed as the largest producer in that area. Harbaugh 3, the farthest south test in that pool, pumped 1886 barrels of oil in 24 hours. Production is from 3157½ feet in the Siliceous lime.

Hartman & Blair's Harbaugh 3, west offset to the National well, drilled plugs and filled to the top with oil in a few hours. It is producing from the Gorham sand at 3150 feet, and is to be tested at an early date.

Braden & McClure et al's Herbel 1, NEc NW 35-14s-14w, one mile south of production in the Gurney pool, pumped 224 barrels of oil natural in 24 hours from the Gorham sand at 3168 feet. It has been classified as a new discovery, and the pool given the name of South Gurney.

Central Petroleum Company's Rush 3-B, in Section 19-12s-15w, was a 546-barrel producer from the Oswald lime at 3064 feet, following acidization. In the Gorham pool, Alva Billings et al's Mermis 3, in Section 9-14s-15w, was completed for 416 barrels of oil from the Oswald lime at 3115 feet after being acidized.

J. C. Shaffer et al's Polcyn 5, Section

A beauty spot on the highway between Tulsa and Ponca City is the Burbank pump station of Continental Pipe Line Company. The station has been delivering oil from Osage County to Continental Oil Company refinery at Ponca City for 17 years. Well-kept grounds, signs and paint make a striking picture.

10-14s-15w, in the Gorham East pool, pumped 1728 barrels of oil natural in 24 hours from 3261 feet in the Gorham sand. In Section 31-14s-13w, in the Hall pool, J. J. Hall et al's Miller 1 was completed for 1161 barrels of oil from the Oswald after being acidized at 2931 feet.

In Sumner County, the forty-first producer was completed in the Wellington area. It is E. B. Shawver et al's Erker 5, NWc 33-31s-1w, which found the sand at 3664 feet, and filled 1000 feet with oil in a short time. Oil later

KANSAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BARTON COUNTY—		
Yarnell & Carlson, Gemerinhardt 1, ne ne sw 36-17s-11w	944	3276
Empire, Rader 1, se se se 12-19s-11w	1042	3321
COFFEE COUNTY—		
Henderson Oil, McCartney 1, sw se se 14-23s-14e (pb 1630)	50	1677
COWLEY COUNTY—		
Shawver, Joslin 4, nw se sw 11-30s-4e	15	2774
Sinclair Prairie, N. Kukuk 21, nw ne ne 24-32s-4e	40	3043
GREENWOOD COUNTY—		
Beren & Gore, Inthurn 4, se ne sw 4-23s-13e	*	1933
Polhamus et al, Marshall 15, sw se sw 34-24s-9e	*	2812
LYON COUNTY—		
Becker Bros., Rossillion 1, se sw ne 19-21s-11e	*	2300
McPHERSON COUNTY—		
Boyle & Grossman, Smith 5, se nw nw 29-19s-1w	*	3458
NESS COUNTY—		
Continental, Thompson 1, ce¼ e½ sw 13-18s-26w	684	4527
RENO COUNTY—		
Continental & Wentz, Snook 1, ne nw sw 10-22s-8w	*	3728
H. F. Thomas et al, Greenwood 1, ne ne ne 6-23s-9w	*	3936
S. J. Houston, Mount 2, sw nw ne 20-24s-4w	1246	3382
Mount 4, ne nw ne 20-24s-4w	*	lcn.
Derby Oil et al, Beltz 2, sw se sw 4-26s-4w	2075	4105
Shell, Mauck 1, csl ne 14-26s-9w	*	4137
RICE COUNTY—		
Shell et al, Sherman "B" 3, se sw ne 16-19s-9w	792	3231
Saco Oil et al, Haxton Estate 1, nw nw ne 30-19s-8w	*	3474
Davis et al, Deuser 11, cw½ e½ sw 31-19s-10w	1166	3294
Shell, Maughlin 1, ne nw se 11-20s-8w	*	3294
Empire, Coldwater 1, se se sw 8-20s-9w	650	3301
Atlantic O&P, Scott 1, ne sw se 20-20s-10w	791	3298
McPherson Drlg., Yaple 2, se se se 10-21s-7w	6377	3384
ROOKS COUNTY—		
Hartman & Blair et al, Hall 1, nw nw nw 25-10s-17w	*	3750
RUSSELL COUNTY—		
Bridgeport, Polcyn 3, se nw ne 10-14s-15w	1579	3295
Shell, Michaelis 1, ne se ne 31-15s-13w	1881	3319
W. I. Southern, Inc., Boomhauser 2, ne sw nw 32-15s-13w	*	lcn.
SEDGWICK COUNTY—		
Earl Wakefield et al, Howard 1, se se ne 25-25s-2e	*	3325
SUMNER COUNTY—		
Shell, Churchill 10, cne sw 25-31s-2e (otd 1890)	378	2193
Olson & Shell, Community 11, nw ne ne 14-32s-2e (otd 2098)	268	2996
Winkler-Koch, Wenrich 1, nw ne sw 23-32s-2e	*	3211
WOODSON COUNTY—		
Woodson P. L., Rhea 9, se sw ne 13-24s-13e	18	1659
Sheedy et al, Tipton 3, sw se nw 28-25s-14e	600	1444
Lewis et al, Riggs 1, sw sw sw 10-26s-14e	*	1500

*Failures; †Junked; ¶Million cu. ft. gas.

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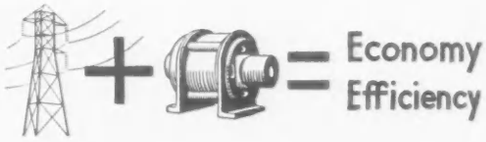


PURCHASED ELECTRIC POWER

PETROLEUM ELECTRIC POWER CLUB

slopped over the top of the casing, and the well began flowing about seven or eight barrels per hour. It is the eighth test to find production on the Erker lease.

National Refining Company's McLean 3, SE SW SE 25-17s-11w, farthest east test in the Bloomer pool of Barton County, topped Siliceous lime at 3287 feet, and filled 809 feet with oil from 3288 to 3290 feet. The hole was deepened to 3295½ feet and filled to 2000 feet in one hour from another pay zone encountered from 3292 to bottom.

The same company's North Lathrop 13, Section 17-23s-4w, in the old Elbing pool of Butler County, which is getting a revival of activity in the shallow sands, was completed for 227 barrels of oil from the Kansas City lime at 2065½ feet, following acidization. Three pays were found and all were acidized. Location for another test has been staked on the lease, one-half mile east of the new producer.

Skelly Oil Company's Dittmers 1, SE SW SW 28-19s-10w, has extended the Rice County area of the Silica pool one-half mile north. The hole filled 2600 feet with oil from the Siliceous lime at 3296 feet. Three-inch tubing was benig run preparatory to acidizing. Siliceous lime was topped at 3293 feet, and the hole filled 800 feet in four hours; 1000 feet in five hours; 1200 feet in six hours, and 1500 feet in eight hours. It later made 1106 barrels of oil in 20 hours with no water showing. Given a pumping test later in the week, the well made 1342 barrels of oil in 24 hours. It was acidized with 1500 gallons at 3295 feet.

In the same area, John H. Tatlock's Berscheidt 8, NWc 6-20s-10w, was completed for 1779 barrels of oil from the Siliceous lime at 3280 feet after being acidized.

Mid-Continent Petroleum Corporation's Risse 6, SEc NE 6-20s-2w, in the Chase pool, topped the Siliceous lime at 3307 feet. After drilling to 3316 feet, the well made 54 barrels of oil the first hour; 70 barrels the second and 48 barrels the next 40 minutes. Operators potential was 1642 barrels.

Torrey & Foster's Rose 1, east of the Chase Townsite, may open a new producing horizon for that part of the field as it picked up a good showing of oil from the Topeka lime between 2680 to 2685 feet. The oil, which appeared to be very heavy, was coming into the hole faster than it could be bailed down. It may possibly be cased off and the hole carried to the Siliceous lime, the formation from which other wells in the field are producing.

R. E. Garden et al's Hauschild 2, NEc 15-21s-7w, was given a potential of 5925 barrels of oil from the conglomerate at around 3390 feet. Jim Davis' Edwards 4, in the Edwards pool, was completed for 511 barrels of oil from the Siliceous lime.

In Barker County, Vaccars Corporation et al's Swartz 1, in Section 30-31s-11w, one-half mile northwest of the discovery producer in the Whelan pool, the first commercial producer in Barber County, flowed 58 barrels of oil per hour during the first hour of a potential test. The oil is coming from the Mississippi lime at 4315 feet. The hole bridged before completion and the test cannot be continued for some time yet.

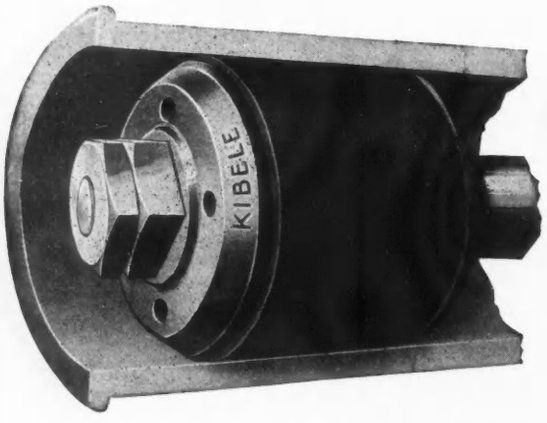
J. A. Shoemaker et al's Stebbins 1, NEc SW 26-7s-17w, east of Stockton in Rooks County, drilled to 2792 feet in the Topeka lime and filled 1800 feet with oil in 24 hours. It swabbed 100 barrels of oil following acidization with 2000 gallons, and is to be reacidized.

Ohio Oil Company's Decker 3, SEc 20-21s-1w, on the east side of the Graber pool of McPherson County, pumped 938 barrels of oil from the Hunton lime at 3310 feet after being acidized. Beardmore & Rosenthal's Johnson 4, NW SE SE 30-18s-2w, in the Nordling field of the same county, was completed for 75 barrels of oil from the Kansas City lime at 2311 feet.

Tom Palmer et al's McBurney 1, CNW NW 12-23s-2w, in the Warkentine pool of Harvey County, was completed for 2085 barrels of oil from the chat at 3000 feet. In Greenwood County, Marshall et al's Steckel 1, CW½ SE 26-24s-12w, in the Christy pool, was completed for approximately 100 barrels of oil daily from the Siliceous lime at 1750 feet.

In Stafford County, Lebow et al's Wolf 1, NWc 3-21s-12w, a test which has been followed with some interest in that part of the state, was abandoned at 2400 feet after dropping 900 feet of casing in the hole. The crew managed to recover 400 feet of the material, but it was in such poor condition that no hope was held out for recovery of the remainder.

Empire Oil & Refining Company's Bartel 1, NWc SE 31-20s-2w, in Marion County, was abandoned at 3166 feet in the Viola lime because of water intrusion. In Russell County, Armer et al's Baier 1, NE NW NE 20-15s-14w, south of the Gideon pool, was also abandoned because of water in the hole.



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22 KANSAS STARTS

Wichita.—Kansas scouts reported 22 new locations in the state during the past week, 10 less than were reported the previous week. Russell County was in the lead with 7, and McPherson County was second with 4. Rice County had 3; Reno 2, and Barton, Cowley, Ellis, Greenwood, Rush and Woodson counties each reported 1.

There were 19 oil wells completed for a total production of 20,596 barrels of oil. There were no gas wells and 13 dry holes, with only two abandoned locations being reported. Completions for the week reached a total of 34.

DECLINE LESSENS

Oklahoma City.—Consistent output of wells in the older part of the field has reduced the percentage decline previously established for the Wilcox zone wells of the pool. The average decline for 345 wells, many of them in the north extension, was 29.76 percent. Potentials, upon which allowables will be based during the six months after October 1, had been taken on that number up to September 20. A week previous the average decline on 253 wells was 30.24 percent.

New Mexico Active

14 LOCATIONS STAKED LAST WEEK IN LEA COUNTY

WEEKLY STAFF REPORT

Hobbs, N. M.—Southeastern New Mexico is maintaining an active drilling program, with various wildcats and semi-wildcats going down, along with a considerable number of wells within established fields. The Eunice and Monument fields are particularly active.

During the past week 11 wells were completed in Lea County fields, and 14 new locations were made within the county. The new tests include 6 in the Monument field, 5 at Eunice, 1 on a virtually proved site between Monument and Eunice, 1 test in the East Jal sandy lime area, and 1 semi-wildcat in the sandy lime belt in the North Eunice area.

Semi-Wildcats Started

The new test between the Monument and Eunice pools is Humble Oil & Refining Company's State Aggies 5, C NE SW 31-20s-37e, for which cellar and pits have been dug.

Derrick has been erected for Repollo Oil Company's Jamison 1, SW SE NE 21-24s-37e, north offset to Plains Production Company's Knight-Humble 1, which recently provided an extension of several miles to the northwest for the East Jal pool in the sandy lime belt.

Repollo Oil Company has dug cellar and pits for a semi-wildcat, York 1, SE SE NE 20-21s-37e, located one mile north of the nearest production in the North Eunice pool of the sandy lime belt and about the same distance southeast of a small wildcat producer drilled this year by Sun Oil Company on the Weatherby tract.

A comparatively new test of considerable interest is Gulf Oil Corporation's Sunshine 1, C SW SW 30-20s-37e, a north offset to Humble Oil & Refining Company's State Aggies 3, at the north end of the Eunice field and toward Monument. Surface casing has been cemented at 350 feet.

New Locations Made

Recently made locations in the Monument field include two by Amerada Petroleum Corporation: Andrews 4, 660 feet from the west and 1980 feet from the south line of Section 12-20s-36e; and Andrews 3, 660 feet from the east and 1980 feet from the north line of Section 11-20s-36e. Humble Oil & Refining Company located Laughlin 2 at a point 1980 feet from the south and 1980 feet from the east line of Section 4-20s-37e. Gulf Oil Corporation has dug cellars and pits for two new Monument wells, Graham State 8-C, C NW SE 25-19s-36e, and Kutter 2-B, C SW NW 28-19s-37e. Shell Petroleum Corporation located State 1-K at the center of NE NE 36-20s-36e.

New wells at Eunice field include two of Gulf Oil Corporation, namely, Orcutt 2-C, C Lot 1, 6-21s-36e, and Leonard 2, C NE SW 22-21s-36e, for which derrick has been erected. Humble Oil & Refining Company has cellar and pits dug for Knox 6, C NE SE 10-21s-36e. Jim Murray et al have set 10¾-inch casing at 174 feet in Red Beds in Wallace 3, C Lot 14, Section 3-21s-36e. Repollo Oil Company's Houston 2, NW SE NW 7-21s-36e, has a derrick up.

Eleven Wells Completed

Among the 11 wells completed last week in Lea County were 9 oil wells, 1 gas well, and 1 dry hole. The 11 completions included 5 in the Monument field, 3 in the Eunice field, and 3 in the East Jal district.

All 5 of the new Monument wells were oil producers. In addition, another well at Monument was re-acidized, and proved to be an especially good producer. The latter was Repollo Oil Company's W. P. Byrd 2, NE NW NW 11-20s-36e, on the southwest edge of the field and one of the best wells in that part of the field. With elevation of 3598 feet, the well was drilled to 3915 feet in sandy lime, after going into the pay zone at 3800 feet. It flowed 16 barrels oil per hour on a 12-hour test through a ¾-inch choke on tubing, showing 5,000,000 feet gas; but was then acidized with 3000 gallons and flowed 110 barrels oil an hour and 4,000,000 feet gas daily through open tubing. This portion of the field previously was not considered as prolific as the main part of the field.

Among the 5 original completions last week in the Monument field were 2 by Amerada Petroleum Corporation. That concern's Haney 1, C SW SW 33-19s-37e, acidized with 3000 gallons, flowed 89 barrels an hour through 1-inch choke on tubing, from 3910 feet. The company's Phillips A-2, C SE NE 31-19s-37e, 3905 feet deep, flowed 357 barrels in 16 hours through ½-inch choke on tubing. Gulf Oil Corporation completed Mathews 3, C SE SE 6-20s-37e, at 3830-3891 feet, elevation 3576 feet. After being swabbed in and flowing 3 days into the pits, the well gauged 93 barrels fluid, 3 percent water, in 15 hours, through open tubing. Humble Oil & Refining Company's M. E. Laughlin 1, C SW NE 4-20s-37e, drilled in lime to 3907 feet and plugged back to 3885 feet, was completed from pay at 3857-3885 feet, being acidized with 4000 gallons and then flowing 5 barrels fluid, 12 percent water, per hour through ¼-inch choke on tubing. Tide Water Oil Company's Anderson 1, C NW SE 8-20s-37e, elevation 3553 feet, logged the pay at 3828-3834 and 3859-3877 feet, and after being started with gas lift, flowed 30 barrels oil an hour on a 10-hour test through 1-inch choke on 2-inch tubing.

New Eunice Wells

All 3 of the new wells at Eunice were productive. Atlantic-Tide Water's Houston 2, NE SW NW 7-21s-36e, elevation 3582 feet, had the pay at 3850-3882 feet, and by natural flow gauged 65 barrels oil per hour through 2½-inch tubing. Gulf Oil Corporation's Arnott-Ramsey 11-C, C NE SE 21-21s-36e, elevation 3595 feet, logged pay at 3845-3890 feet, was swabbed dry, then was acidized with 2000 gallons, and flowed 716 barrels oil the first 24 hours through open tubing. The Gulf Company's Orcutt 5, C Lot 12, 5-21s-36e, elevation 3587 feet, pay at 3785-3890 feet, was acidized with 2000 gallons, and through open 2-inch tubing flowed 305 barrels oil in 20 hours.

East Jal Test Dry

The three completions in the East Jal district included a dry hole, a gas well, and an oil well. The dry hole was Gulf Oil Corporation's F. C. King 1, C SW NW 5-23s-37e, elevation 3371 feet, abandoned in lime at 4052 feet. The well was a north offset to Skelly Oil Company's Harrison 1, discovery well of the so-called Skelly sand pool. The Gulf well was shot from 3696-3783 feet with 250 quarts of nitro, acidized with 2000 gallons acid, swabbed dry, deepened to take in showings between 3858 and 3877 feet, but again swabbed dry, and finally after further unsuccessful deepening was abandoned.

Gulf Oil Corporation completed S. J. Carr 1, C NW SW 3-24s-37e, half mile southwest of the Amon G. Carter Mattox 1, sand discovery well, as a pumping producer. The well has elevation of 3267 feet, went into the pay at 3514 feet, drilled to 3886 feet, plugged back to 3625 feet, and after being shut

NEW MEXICO Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
LEA COUNTY (East Jal Field)—		
Gulf, S. J. Carr 1, c nw sw 3-24s-37e	80	3886
F. C. King 1, c sw nw 5-23s-37e	*	4052
Jal Natural Gas Co., Bates 1, c nw sw 20-25s-37e	¶25	2865
LEA COUNTY (Eunice Field)—		
Atlantic-Tide Water, Houston 2, ne sw nw 7-21s-36e	1560	3882
Gulf, Arnott-Ramsey 11-C, c ne se 21-21s-36e	720	3890
Orcutt 5, c Lot 12, Sec 5-21s-36e	360	3890
LEA COUNTY (Monument Field)—		
Amerada, Haney 1, c sw sw 33-19s-37e	2100	3910
Phillips A-2, c se ne 31-19s-37e	435	3905
Gulf, Mathews 3, ce se se 6-20s-37e	144	3891
Humble, M. E. Laughlin 1, c sw ne 4-20s-37e	200	3907
Tide Water, Anderson 1, c nw se 8-20s-37e	720	3877

*Failures; †Junked; ¶Million cu. ft. gas.

in 3 days pumped off in yielding 20 barrels oil in 6 hours.

Jal Natural Gas Company completed Bates 1, C NW SW 20-25s-37e, as a gas well. The test had elevation of 3049 feet, and logged the gas pay sand from 2707 feet to the bottom of the hole, at 2865 feet, gauging 25,000,000 cubic feet daily.

Gulf Oil Corporation last week had a fishing job in L. M. Buffington 1, C NW SW 13-25s-37e, extension test 1¾ miles southeast of the discovery well of the Stuart sand area. The Gulf well missed the regular sand pay of the pool, finding only gas instead of oil. The well has an elevation of 3091 feet, tested sulphur water at 3601 feet, and after drill pipe stuck in lime at 3903 feet, the pipe was shot off at 3400 feet. The operators last week were fishing for several joints of pipe and the bit that remained in the hole.

Wildcats Drilling

Among the Lea County wildcats lately spudded is Brown & Reynolds' Parcell 1, C NW SE 8-21s-38e, about 6 miles northeast of the town of Eunice, and a similar distance from production in the Hardy pool.

It is reported that operations will be resumed shortly on the wildcat, Talbot & Mullineaux's Quincy-Ricker National Bank 1, C SE SE 7-16s-36e, in the Lovington area. Roy K. Stovall of Hobbs is credited with having obtained an interest in the wildcat and with having plans to move in a rotary rig, for proceeding from the present shut-down depth of 200 feet. The wildcat is on acreage farmed out by Humble Oil & Refining Company.

Another wildcat in the Lovington area is Magnolia Petroleum Company's John Scharbauer-Eidson 1, C NW SE 29-16s-35e, elevation 4014 feet, drilling in lime at 4764 feet.

LOSE TAX APPEAL

Washington — Big Lake Oil Company last week lost its appeal to the United States Board of Tax Appeals from a decision of the commissioner of internal revenue holding it liable for income taxes upon $598,571, representing the agreed fair market value in January, 1927, of 2450 shares of stock of Reagan County Purchasing Company.

The stock was half of a block which was to be divided among a group of oil producers upon the basis of their deliveries during a certain period of crude oil for transportation through a pipe line financed by Marland Oil Company, under an agreement entered into in 1924.

Big Lake Oil Company contended that the stock was income in 1924, but the commissioner held that the stock was not actually transferred to it until 1927 and the amount of stock which it would receive could not earlier have been determined.

OFFICIALS of two subsidiaries of The Texas Corporation attended the Frontier Centennial exposition at Fort Worth September 21. They were Burt E. Hull of Houston, president of The Texas Pipe Line Company, and Cecil G. Holdaway of Melburne, Australia, manager of The Texas Company, Australasia, Southern States. The latter is making a two week's tour of this country, devoting a large part of the time to inspection of The Texas Company's properties in Texas.

Wildcat Work Active

WEST TEXAS PROVEN FIELDS ALSO ARE BUSY

NORTH & WEST TEXAS

WEEKLY STAFF REPORT

Midland, Texas.—West Texas currently is the scene of considerable exploration drilling in wildcat areas and on the edges of established fields, while development is proceeding steadily also within the proved areas.

Attracting particular attention last week was the Dawson County wildcat of Albaugh and associates, which yielded an encouraging quantity of oil by swabbing from lime at 4991 feet.

Another interesting, although not favorable development, was the encountering of salt water in the Ordovician in Gulf Oil Corporation's second deep test in the Sand Hills field, Crane County.

The Henderson pool in Winkler County last week was extended about a half-mile to the northwest.

A wildcat in Brewster County is yielding some oil and gas along with sulphur water, and will be tested further.

The Yoakum County wildcat of Roosevelt & Stogner on the Googins Estate finally has been abandoned.

Most Completions Oil Wells

In the fields of West Texas last week there were 29 wells completed, in comparison with 36 the previous week. As usual, the completions consisted predominantly of productive wells, only 2 out of the 29 having been dry holes.

Winkler County was the leader among the various counties in furnishing new wells, having had 8 completions, including 6 in the Sayre field, and 1 each in the Halley and Henderson fields. Ward County was close behind with 6 new oil wells. Pecos County followed then with 5 completions, including 2 oil wells and a dry hole in the Toborg field, and 1 new oil well each in the Pecos Valley and Yates fields. Howard County had 4 completions, all oil wells. Upton County also had 4 completions, all in the McCamey field, including 3 oil wells and a dry hole. The other 2 West Texas completions were oil wells in the Means field, Andrews County, and the Goldsmith field, Ector County.

Dawson Wildcat Swabs Oil

Ray Albaugh and associates' John Robinson 1, northwestern Dawson County wildcat, 15 miles northwest of Lamesa, early last week yielded 75 barrels of oil in swabbing down from 3500 feet to within 400 feet of the bottom in the first swabbing test for a week, and then 16 hours later gave up 19 barrels of oil when swabbed down to about 300 feet off bottom. The bottom of the well is at 4991 feet in lime. The top of the lime is around 4600 feet. The well two weeks ago gave indication of developing small production, when it yielded some 33 gravity oil from thin sections of saturated lime at 4915 feet and at 4944 feet. Subsequently, the test was drilled ahead to the present depth. It is in the E. L. & R. Survey, Section 46, Block M. The wildcat apparently has opened a new field, although the importance of the area remains to be seen. The well is 38 miles northeast of the Means pool, Andrews County, the nearest field.

Water in Deep Test

Gulf Oil Corporation's Waddell et al 2, the second Ordovician test in the Sand Hills field, Crane County, last week yielded 8 barrels of mud, 3 barrels of salt water, some gas, and a little oil in a 15-minute drill-stem test from 6113 feet to the bottom of the hole at 6231 feet. The well entered the Simpson, top member of the Ordovician, at 5996 feet. Its elevation is 2619 feet. The well is 1½ miles northeast of the company's Waddell et al 1, which proved productive in the Ordovician. The No. 2 well is running about 60 feet lower than the No. 1, according to correlation of the Simpson marker. Waddell et al 1 originally found sulphur water in the Ellenberger formation of the Lower Ordovician, which was topped at 6316 feet and penetrated to 6450 feet; but it was plugged back and now from the Simpson section at 5979-6050 feet yields 34.7 gravity oil that is the only Ordovician production in West Texas outside of the Big Lake field.

Henderson Field Widens

The half-mile northwest extension given the Henderson field, Winkler County, last week was through the completion of R. H. Henderson's Daugherty 1. Henderson, a Midland, Texas, operator, discovered this field that bears his name. Daugherty 1, Section 33, Block 74, P.S.L. Survey, flowed into the pits at the rate of 2500 barrels daily from 3045-3098 feet.

The Brewster County wildcat that was attracting attention was Floyd C. Dodson et al's Texas American Syndicate 1, in which fluid rose 2000 feet in the hole in 12 hours, while drilling in lime around 3443 feet. Although the fluid was mostly sulphur water, it was reported to contain also some oil and gas. Located in Section 66-10 G. H. & S. A. Survey, the well has elevation of 4233 feet, hit Delaware lime at 2297 feet, and had a small gas show at 2910-2917 feet. To test that showing, 8¼-inch casing was set with packer at 2887

feet, but following the more recent showing, the casing has been pulled and it will be re-run to test the lower zone.

The Yoakum County wildcat of Roosevelt & Stogner, Googins Estate 1, Section 215, Block D, John H. Gibson Survey, was plugged and abandoned at 5361 feet in lime that showed sulphur water.

The Keys field of Winkler County was extended about one mile southward late last week when Bert Fields completed Pure-Cowden 1, Section 26, Block 5, PSL Survey, for natural production of 500 barrels daily through casing from 3000 feet.

Gulf Oil Corporation's Crane County wildcat, McKnight 2, Section 9, Block B-21, PSL Survey, continues to show up favorably, having had an increase in oil at 3617 feet. Oil was coming into the hole at the rate of three barrels an hour while the well was drilling ahead in lime. The well has shown gas and oil at various levels between 3100 feet and the present depth, but now is making the most favorable showings so far.

Another interesting wildcat in Crane County is Moore Brothers' Barnsley 1, Section 43, Block 32, PSL Survey, which is drilling in lime below 5658 feet.

A wildcat in Ector County that is attracting considerable attention is Sinclair Prairie Oil Company's J. L. Johnson 1-A, Section 42, Block 42, T-1-S, T&P Survey, between the North Cowden and Foster fields. It is considered by some as running high structurally and late last week was drilling lime at 4085 feet. Another Ector County wildcat of interest is York & Harper's York 1, about five miles southwest of the Addis field and in Section 10, Block 44, T-3-S, T&P Survey, lately reported running casing with 500 feet of sulphur water in the hole, while bottomed at 3867 feet.

WORK REVIVED

End of water shortage felt in North Texas

Wichita Falls, Texas.—The rains of recent weeks have appreciably stimulated drilling in North Texas. For about three months previously, field work had been handicapped by the drouth and shortage of water, although some wells were being drilled with water from the Brazos River and other streams. Young County development was particularly hampered by the dry weather, and various tests that were shut down have resumed drilling. In consequence of the rains, drilling has been resumed also on several wells in Collin, Grayson, Cooke, and adjacent counties.

Montague Wildcat Produces

A well that attracted considerable interest last week was the D. T. Holt 2 of Sinclair Prairie Oil Company and Gibson & Jennings, a wildcat 6 miles northeast of Nocona, in Montague County. The well was pumping about 35 barrels of 31 gravity oil per hour from total depth of 1703 feet, with 6⅝-inch casing set at 1605 feet. The well had logged sand with oil show at 1605-1611 feet, sandy lime with oil show at 1624-1625 feet, and sand with a better show at 1693-1703 feet. The successful completion of the well gives a promising aspect to a large section of the county around the test.

The production of this Montague County wildcat presumably is from the lower Canyon sandy lime series. The well is near the same interests' Holt 1, Kaufman County School Lands Survey. The operators had a 6500-foot drilling obligation on the Holt 1, but ran into granite at 3615 feet and drilled into the granite to 3648 feet. Before exhausting possibilities for deeper production by going into the granite, however, Holt 1 had encountered numerous showings at shallower depths. Consequently, the well was plugged back at intervals to test, but did not develop commercial production. However, the showings in the No. 1 well gave encouragement for drilling the second test in the area. Holt 1 had the top of the Canyon sandy lime series at 1208 feet.

Sinclair Prairie Oil Company has the controlling interest in a drilling block of about 4000 acres surrounding the new well.

Cooke County Active

In Cooke County, wildcats and proved field extensions have shared attention. Big Indian Oil & Development Company of Kansas City is preparing to drill a wildcat on a 40-acre lease, T. E. McFadden tract, E. W. Cullen Survey, Abstract 255, 3 miles south of the Anderson-Kerr pool. Newburn et al have resumed drilling Winton 1 in the William Campbell Survey, 3 miles south of the Anderson-Kerr pool. Tom C. Patten, Inc., last week extended the Anderson-Kerr

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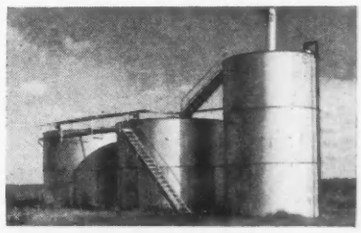

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pool 466 feet westward, encountering oil sand at 1939 feet. The Patten interests have completed a pipe line and loading rack on the M. K. T. Railroad north of the field and have begun shipping oil, paying current posted prices. Several cars have been shipped to a refinery in Canada.

A wildcat is scheduled to start drilling by October 10 on a site 4½ miles north of Sadler, Grayson County, on a 2500-acre block assembled by Hubert Terry. The location is on the J. C. Mulder 48-acre tract, J. Barefoot Survey, 330 feet from the west line of the Mulder tract and 1000 feet from the north line of the survey.

Olson Drilling Company has moved a rig to the Dan Utiger 80-acre tract north of Pottsboro and west of Denison for a second test of the area, the new location being in the center of the P. P. Cady Survey. The site is about a mile south of Mauldin et al's Southwestern Life Insurance Company 1, J. C. Jamison Survey, which was abandoned at 4675 feet.

In Young County, 3 miles east of Olney, Estacabo Oil Company's wildcat, Morrison 1, recently was testing an oil-showing sand at 937 feet.

New Archer Test

Clark & Mayfield have made location in Archer County for Taylor 1, a test about 1½ miles northwest of Continental Oil Company's Gose tract dry hole, which had several oil shows at various depths before abandonment at 5226 feet as the county's deepest test. The Clark & Mayfield location is 330 feet from the south and east lines of Section 17, A. T. N. C. L. Survey.

Wichita County has furnished various interesting developments lately. Wilson & Ligon have cemented casing in Allen-Foster 1, wildcat 2 miles northeast of Sunshine Hill, to test a promising sand at 1270-1284 feet. The test is interesting because located in an area heretofore partially condemned. J. Morton's J. Hausler 1, a wildcat a half-mile north of the city limits of Wichita Falls, is drilling below 3200 feet in shale. Mrs. Jesse Pyle's Munger Brothers 2, productive at 1097-1099 feet, in an area producing regularly from the 3800-foot level, is expected to cause a revival of shallow drilling in that section of the county.

In Foard County The Texas Company is drilling below 3300 feet in Less K. Johnson 8, the county's only active test.

The substantial amount of drilling now in progress in North Texas was reflected last week in the fact 38 wells were completed. In the previous week there had been 34 completions. The 38 completions of last week included 27 oil wells and 11 dry holes.

Cooke County was most prominent in the week's record of new wells, having furnished 13 completions, or about one-third of the district's total. Young County followed with 8 completions, and Archer County had 7, while Wichita County furnished 4 wells, Jack County 3, Montague County 2, and Baylor County 1.

It has been estimated that heat of combustion of a gallon of gasoline is equivalent to more than 98,000,000 foot-pounds of work, which, at 100 percent efficiency, is sufficient to lift a 3100-pound motor vehicle 6 miles.

FISHING AGAIN
Erath County wildcat is having hard luck

Ranger, Texas.—Seaboard Oil Corporation last week successfully finished one fishing job on its Erath County wildcat, L. V. Garret 1, only to be confronted immediately with another. The operators recovered the bit that was lost in the hole at the 4062-foot level, but lost another bit in the hole and late last week were again fishing.

The wildcat is about 6 miles southeast of Dublin, in the Robert McKinney Survey. It was projected as a test of the Ellenberger lime, and at the above mentioned depth is 82 feet in that formation, having encountered the top of the Ellenberger at 3980 feet. Elevation of the well is approximately 1305 feet.

Although the test so far has not had any showings, there remain possibilities of getting encouragement, as showings possibly might be found several hundred feet below the top of the Ellenberger.

TEXAS PANHANDLE
Continues moderate drilling activity

Pampa, Texas.—The Texas Panhandle continues moderately active in drilling, with various wildcats and semi-wildcats lending interest to the development in the area.

Ten new wells were started during the week in the district, all being within established fields. The new drilling sites include 5 in Hutchinson County, 2 in Wheeler County, and 1 each in Gray, Moore, and Wheeler Counties. That in Wheeler County is some distance from production but on an apparently proved location, being Ohio Fuel Supply Company's A. H. Finley 1, H. & G. N. Section 75, Block 17, 330 feet from the north and east lines of the north half of the northeast quarter of the section. Materials for the well are being moved in.

Several wildcats in the Panhandle are making progress. In Hansford County, L. S. Hobbs' Pearson-Hitch 1, Section 290, Block 2, elevation 3002 feet, is drilling below 600 feet. The Randall County test of Oxnard and associates, Oxnard 1, Section 85, Block 2, which has an elevation of 3587 feet, is shut down at 5720 feet. In Roberts County, Chicken Creek Oil Company's Ledrick 1, Section 55, Block C, is fishing at 2840 feet.

Phillips Petroleum Company was drilling last week below 4910 feet in its interesting well, G. W. Porter 1, about 2 miles northeast of the nearest production in the Shamrock field, Wheeler County. The well is seeking production in the Ordovician zone on the north flank of a buried granite ridge. Recently it showed 1 million feet of gas from lower granite wash at 4802-4804 feet, with an elevation of 2405 feet. Drilling ahead, the well had a small show of gas and oil at 4836-4841 feet, showed 1000 feet of water in the hole at 4850 feet and 2500 feet when the 4900-foot level was reached.

The Panhandle last week furnished 14 well completions, compared with 18 the previous week. The 14 completions of last week included only 1 dry hole, the others having comprised 12 oil wells and 1 gas well.

Hutchinson County was represented conspicuously among the new wells, having furnished 9 of the Panhandle's 14 completions of the week. Gray County had 4 completions and Moore County had 1.

NORTH TEXAS
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
ARCHER COUNTY—		
R. B. Austin et al, J. C. Stinnett 4, blk 19, W. L. Herring sur A-168..	*	718
L. T. Burns, Bert Lowry 1, Ann Scott sur A-389	60	1500
C. B. Christie et al, L. F. Wilson 7, blk 14, H&TC sur A-227	218	1618
Consolidated Oil Co., W. H. Portwood 8-CD, sec 2411, TE&L sur.	390	1444
Golding & Cochran, J. L. Anderson 1-B, blk 22, SAR sur A-726	*	1364
Petroleum Producers, J. R. Garvey 1, sec 1802, TE&L sur	*	826
Texas Plains Oil Co., W. H. Terrell 2-A, blk 16, W. L. Herring sur A-168	*	705
BAYLOR COUNTY—		
Petroleum Producers, W. H. Portwood 33, sec 1281, TE&L sur....	50	1409
COOKE COUNTY—		
J. L. Anderson et al, T. C. Delisle 3, H. Strong sur A-930	455	2040
Anderson & Kerr, Millie Hill 2, A. C. C. Bailey sur A-44	327	1967
Millie Hill 3, A. C. C. Bailey sur A-44	411	1963
H. Christian et al, J. T. Donald 1, John Guffey sur A-1545	16	3130
Joe DeGrazier, Elizabeth P. Bell 3, F. J. Lindheimer sur A-571	610	1942
Denver P&R Co., Ed Wilson Est. 1, H. Strong sur A-930	635	1983
F. W. Merrick, Inc., J. W. Muerer 3, B. Anibal sur, A-5	4	796
Mocarz Oil Co., J. C. Embry 1, T. J. Moss sur A-736	15	1195
Mullins & Weil, R. S. Rose 2, T. E. Hardeway sur A-464	865	1951
Rapp, Sledge & Gleason, Mrs. C. A. Brown 1, A. C. C. Bailey sur A-44	630	1999
Seitz, Comegys & Seitz, R. W. Trew 4, B. H. Miller sur A-668	2	715
J. C. Shaffer et al, W. H. Jarrett (Curry) 1, H. Strong sur	390	2121
Whitfield et al, R. S. Rose 4, T. E. Hardeway sur A-464	550	1948
JACK COUNTY—		
K. E. Edmonds, J. T. Hunt Est. 1, W. L. Britt sur A-1366	7	470
Iron Mountain Oil Co., F. H. Rhodes 1, E. F. Kinder sur A-2800, flowing	200	2398
Charles Kadane, E. F. Smith 1, SPRR sur A-552	108	2377
MONTAGUE COUNTY—		
Bridwell Oil Co., J. S. Dennis 7, F. Robertson sur A-620, pumped.	110	1687
F.H.E. Oil Co., Crownover 2, F. Robertson sur A-620	13	1270
WICHITA COUNTY—		
Brashear Drilling Co., Waggoner Est 2, blk 148, H&TC sur A-784	*	530
Culbertson Co., Waggoner Bros. 77, sec 13, BS&F sur A-394	*	390
Pete Harmon et al, Mills 1, Jno. Deck sur A-52	*	2306
Perkins & Cullum, Burnett 18, sec 5, SA&MG sur A-271	15	1352
YOUNG COUNTY—		
L. T. Burns, W. A. Rushing 4, sec 3401 TE&L sur	35	906
Cato Oil Co., G. B. Hamilton 13, sec 1393 TE&L sur	80	889
Chambers & Wilson, Benson 1, sec 1393 TE&L sur	*	992
Bob Elmore, W. H. Millican 1, sec 1978 TE&L sur	*	475
Reese L. Hayes 1, W. D. Drum 1, J. R. Cooke sur A-1405	*	610
Nash & Windfohr, W. S. Simms 1, D. Franklin sur A-1425, pb 3800 ft	90	4259
Panhandle Ref Co., Prideaux 4, A. McMullen sur A-198	92	738
Shappell Oil Co., J. W. Bullock 1, sec 423 TE&L sur	*	420

*Failures; †Junked; ¶Million cu. ft. gas.

TEXAS PANHANDLE
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
GRAY COUNTY—		
Gulf Oil Corp., Barrett 4, sec 128, blk 3	608	3299
Kimsey et al, Stephens 1, sec 187, blk B-2	*	2475
Magnolia, John Haggard 6	576	3329
Pampa Production Co., Harrah 7, sec 150, blk 3	502	3224
HUTCHINSON COUNTY—		
Crosbie, Inc., Pitts 13, sec 7, blk M-21	556	3085
Phillips Petroleum Co., Perkins 7, sec 16, blk X02	314	2985
Shell, Belle Wisdom 1, sec 21, blk M-23	621	3187
Stanolind, Moore-Landon 7, sec 125, blk 4	337	3095
Stekoll Oil Co., Whittenburg 8, sec 19, blk 47	344	2968
Travelers Oil Co., Haile 2, sec 4, blk M-21	589	3080
Turman-Plains, Whittenburg B-2, sec 19, blk B&M	20	2860
Whittenburg B-3, sec 58, blk 46	515	2745
U-Tex Oil Co., Ware A-6, sec 20, blk M-21	688	3089
MOORE COUNTY—		
Hagy et al, Taylor 1, sec 2, blk 6-T	¶12	3080

WEST TEXAS

Company, Well and Location	Init. Prod. Bbls.	Depth
ANDREWS COUNTY (Means Field)—		
Humble, J. S. Means 9, blk A-35, sec 22, PSL sur	445	4535
ECTOR COUNTY (Goldsmith Field)—		
Empire, H. E. Cummins 1-B, blk 45, sec 34, T-1-N	770	4305
HOWARD COUNTY—		
Iron Mountain Oil Co., Reed 11, blk 30, sec 46, T-1-N, T&P sur.	636	2780
Owen D. Murray, Davis Hrs. 5, blk 30, sec 2, T-1-S, T&P sur	960	2808
Sinclair Prairie, Davis 4-B, blk 30, sec 2, T-1-S, T&P sur	556	2820
Dodge 43, blk 30, sec 11, T-1-S, T&P sur	270	2815
PECOS COUNTY (Pecos Valley Field)—		
D. G. Gray, Iowa Realty 2, blk 10, sec 21, H&GN sur	260	1637
PECOS COUNTY (Toborg Field)—		
Cardinal Oil Co., Tippett 41-E, blk 194, sec 40, GC&SF sur	266	515
Paul Childress, Tr., Smith 7, blk 194, sec 41, GC&SF sur	15	377
Corvette Oil Co., Monroe 4-A, blk 194, sec 39, GC&SF sur	*	494
PECOS COUNTY (Yates Field)—		
Ohio Oil Co., Yates 49-A, sec 34½	2160	1382
UPTON COUNTY (McCamey Field)—		
M. D. Bryant, Robbins 1, sec 4, GC&SF sur	1100	2196
J. W. Ellis, Robbins 2-B, sec 4, GC&SF sur	880	2235
T. B. Knox, Sherk-Bell 1, blk 3, sec 17, MK&T sur	*	2350
Stanolind, Burleson 40, J. Nideuw sur	1260	2056
WARD COUNTY—		
Abell Bros., Potts 4, blk B-29, PSL sur	396	2317
California Co., Gordon 35, blk 34, sec 6, H&TC sur	1300	2510
Grisham-Hunter, Himmel 1, blk B-29, sec 30, PSL sur	550	2400
Kirk & Anderson, Allen 3, blk 5, sec 11, H&TC sur	20	2240
Provine & O'Quinn, White 1, sec 21, M. H. Short sur	82	2190
Texas Pacific Coal & Oil Co., James 17, blk 34, sec 5, H&TC sur	590	2530
WINKLER COUNTY (Halley Field)—		
Phillips, McCabe 1, blk B-12, sec 1, PSL sur	895	2949
WINKLER COUNTY (Henderson Field)—		
Humble, Walton 5-C, blk 74, sec 34, PSL sur	1150	3080
WINKLER COUNTY (Sayre Field)—		
Magnolia, N. R. Colby 3	240	3130
J. B. Walton 34	300	2937
Navarro Oil Co., Drane Tr. 2, blk 26, sec 35, PSL sur	485	3125
Sinclair Prairie, J. B. Walton 6-B, blk 26, sec 24, PSL sur	1380	2961
Skelly, N. R. Colby 1, blk 26, sec 23, PSL sur	1090	2975
Westbrook Oil Co., Hendricks 12, blk 26, sec 14, PSL sur	850	3132

*Failures; †Junked; ¶Million cu. ft. gas.

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Six Talco Wells

INCLUDE 5 PRODUCERS; CAYUGA WELL IMPROVES

WEEKLY STAFF REPORT

Tyler.—In the East Texas district outside of the East Texas field, last week's developments included completion of half a dozen new wells at Talco, increase of distillate in the new deep producer at Cayuga, finishing of a good well on the southwest edge of the Cayuga field, starting of more drilling in the Sulphur Bluff field, and progress in various interesting wildcat tests.

Talco field now has somewhat over 20 wells actually drilling or rigging up, most of them being in Titus County, but several being in the Franklin County portion of the area. In addition, there are more than half a dozen wells shut down. In the field there are also nearly a dozen derricks not yet equipped with rigs. Talco now has over 60 completed oil wells, of which about 60 percent are flowing while about 40 percent are pumping.

Six Completions at Talco

Talco field last week furnished 6 well completions, including 4 in Titus County and 2 in Franklin County. One of the Titus County tests was dry, but all other completions for the week were oil wells.

The unproductive test was E. E. Combs' F. Jones 1, M. V. Delgado Survey, Titus County, elevation 372 feet, which did not encounter any oil sand and which was abandoned at 4367 feet. The other four Titus County completions included wells by both major companies and independent operators. Housh, Scofield & Thompson Drilling Company's O. Tennison (Owings) 1, M. V. Delgado Survey, elevation 370 feet, flowed 10 barrels per hour through open 2½-inch tubing from 4320 feet. Humble Oil & Refining Company's King & Hughes 7, A. Rhinehart Survey, elevation 368 feet, flowed 78 barrels the first 24 hours through ¼-inch choke from 4334 feet. Magnolia Petroleum Company's W. H. Crawford 1, I. P. Stern Survey, elevation 378 feet, pumped 378 barrels the first 24 hours through 2½-inch tubing from 4322 feet. Nivla Oil Company's Kelley 2, J. Salmon Survey, a location, was abandoned.

On the Franklin County side of the Talco field, Humble Oil & Refining Company's King & Hughes 6, Orlando James Survey, elevation 365 feet, flowed 245 barrels the first 24 hours through ¼-inch choke from 4325 feet. McAlester Fuel Oil Company's Crawford 10, Orlando James Survey, elevation 366 feet, flowed initially 36 barrels an hour through 2½-inch tubing from 4334 feet.

Since its original completion over a week ago, Cayuga field's second deep producer has shown an increase in output of distillate. The well is Edens 15 of Tide Water Oil Company and Seaboard Oil Corporation. By the middle of the past week the production had increased to 443 barrels of 62.5 gravity distillate in 24 hours, along with about 11,000,000 feet of gas daily, flowing through ¼ and 7/8-inch chokes on the casing and ½ and ⅜-inch chokes on the tubing. This output of distillate was greater than that several days previously, when the well flowed for 8 hours at the rate of 16 barrels of distillate per hour and then also showed around 11,000,000 cubic feet of gas daily, flowing through the same chokes mentioned above. Edens 15, located in the Sam Snider Survey, Anderson County, has elevation of 313 feet, encountered upper Glen Rose formation of the Trinity series at 6040 feet, the lower Glen Rose at 7350 feet, and was drilled to 7570 feet, after which 7-inch casing was cemented at 7364 feet. It began flowing after being washed an hour.

Edens 15 is 1¾ miles southwest of the same operators' N. N. Wills 21-A, first Trinity test in the field, a gas and distillate well.

The new well completed last week on the southwest edge of production in the Cayuga field was Stanolind Oil & Gas Company's J. S. Cullinan 1, on a 365-acre tract in the E. G. Rector Survey, Freestone County. The well is in a sparsely drilled area, and it proved to be a better producer than adjacent tests, being an offset to a gas well. Early reports indicated the well initially gauged 150 barrels of oil daily through ⅛-inch choke on tubing, from perforations in the 7-inch casing at 4006-4008 feet. The 7-inch casing was cemented at 4024 feet and bottom of the hole was at 4027 feet. After the well was drilled in, it was swabbed originally but failed to flow, and then the perforations were made, without plugging off the bottom of the well. The well had the top of the Woodbine at 3872 feet.

New Drilling at Sulphur Bluff

Two new tests have been started in the Sulphur Bluff field, Hopkins County, which produces from the Trinity series. These two new locations represent the first activity for the area outside of that which has been carried on by the field's discoverers, Dilworth S. Hager, W. P. Luse and Leon Russ. Walter Goldston's H. J. Smith 1, J. A. Croft Survey, about 3 miles southeast of Sulphur Bluff, last week was drilling ahead after setting surface casing at 300 feet. The location is 3300 feet north and 2350 feet east of the southwest corner of the survey. The other new location in the area is that of W. P. Chandler of Sulphur Springs, near the center of the J. K. McLaren 5-acre lease in the Alex O. Wetmore Survey. The field's discovery well was drilled in that survey.

Houston County

A feature of the past week was abandonment of a location that had been made in Houston County, about half a mile southwest of Grapeland. The location was the A. B. Spence 1 of Robert Reagan, J. C. Barnett, and associates, on a 75-acre tract in the J. F. Martin Survey. The location was several miles south of Ellison, McBride and associates' Bean 1, wildcat

EAST TEXAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
JOINER AREA—		
D. K. Caldwell, B. Fox A-3	8000	3737
DeArmand et al, Crook Hrs. 4	300	3639
Humble, R. A. Barksdale A-11	4000	3788
M. Kangerga A-56	5000	3664
M. Kangerga B-15	6000	3657
Overton Refining Co., Clay 10	265	3604
Retsal Drilling Co., Coats 3	60	3572
J. B. Sneed, A. Harmond (J. B. Wilson) 2	8000	3612
W. L. Sessions, S. Stone 12	5500	3797
Stanolind, J. Alford 13	6000	3807
W. F. Weeks et al, Motley 4	3500	3768
J. O. Whittington, Moore 2	20	3610
KILGORE AREA—		
Arcadia Refining Co., Sample 10	4000	3744
East Whaley Oil Co., Elder Bros. 2	4000	3565
Gulf Oil Corp., Wm. Clayton 9	6500	3561
Humble, H. Sexton B-34	3000	3664
Magnolia Petroleum Co., C. C. Still 14	7500	3653
W. P. Moore 16	6000	3678
Royall Pet. Corp., W. Robertson 1	70	3600
Sinclair Prairie, M. Kennedy D-4	100	3617
Sun, Beall 23	4500	3632
Cole 35	6300	3544
Texas Co., R. B. Walls 20	6300	3667
T. W. M. Oil Co., Sabine River 6, Tr. 1	3500	3589
LONGVIEW AREA—		
Gulf Oil Corp., J. C. Judge 79	8000	3524
L. & G. Oil Co., Cone & Williams 1	5000	3712
Lyons & Neely, Morgan 1	30	3748
Magnolia Petroleum Co., C. E. Hineman 18	8000	3660
Royall Pet. Co., P. E. Harris B-4	*	3622
Stanolind-Falcon, F. Williams B-14	7000	3701
Stanolind-Tide Water, P. McGeorge 11	5500	3484
Sun Oil Co., Haynes 31	6500	3635
ANDERSON COUNTY (Camp Hill Field)—		
Gulf Oil Corp., M. J. Ross (54.7-ac tr) 1, Robt. Erwin sur	*	8383
ANDERSON COUNTY (Cayuga Field)—		
Rosier-Pendleton, W. F. Wathen 3, B. Towles sur	25	4049
Tide Water Oil Co. & Seaboard Oil Corp., J. N. Edens 15, on 988.6 ac tr, Sam Snider sur	¶11-384	7570
FRANKLIN COUNTY (Talco Field)—		
Humble, King & Hughes 6, Orlando James sur	1000	4325
McAlester Fuel Oil Co., Crawford 10, Orlando James sur	865	4334
FREESTONE COUNTY (Cayuga Field)—		
Stanolind, J. S. Cullinan 1, 365-ac tr, E. G. Rector sur	3000	4027
TITUS COUNTY (Talco Field)—		
E. E. Combs, F. Jones 1, M. V. Delgado sur, no sand	*	4367
Housh, Scofield & Thompson Drilling Co., O. Tennison (Owings) 1, M. V. Delgado sur	240	4320
Humble, King & Hughes 7, A. Rhinehart sur	300	4334
Magnolia, W. H. Crawford 1, I. P. Stern sur	375	4322

*Failures; †Junked; ¶Million cu. ft. gas.

gas producer. That well makes a large amount of distillate for a gas well, and some operators consequently believe the well is near an oil accumulation. The gas well is producing from Woodbine sand at 6025-6037 feet. However, it was reported last week that a recent 24-hour test of the well indicated decreased production of both gas and distillate. In the townsite of Grapeland, a short distance from the wildcat producer, permits for townlot drilling have been applied for, but so far the Texas Railroad Commission has not acted on them, and it is not known if the commission will grant those permits for the townsite drilling.

In East Texas outside the East Texas field, somewhat over half a dozen new drilling locations were made during the past week, including 2 in the Cayuga field, 1 at Long Lake field, 2 in the Sulphur Bluff field, and 3 at Talco.

An East Texas wildcat now reported abandoned is H. L. Parsons and Atex Oil Company's H. L. Wyatt 1, on a 140-acre tract in the Simon Sanchez Survey, Henderson County, 3½ miles southwest of Chandler. The well had surface elevation of 346 feet, logged Austin chalk at 4200-4553 feet, top of the Woodbine series at 4825-4835 feet, and cored water sand, no show, at 4878-4890 feet. The well later was reported abandoned in salt water sand at 4932 feet.

AGAIN ON INCREASE
Drilling in big field to resume volume

Tyler, Texas.—After having fallen lately to the lowest level since the early history of the field 5½ years ago, drilling activity in the East Texas field probably will show some increase in the weeks ahead. Foreshadowing some revival of drilling in the big field, well completions showed a small increase last week, and the Texas Railroad Commission granted a comparatively large number of permits to drill on tracts in the area.

During the past week 32 wells were completed in the East Texas field, compared with 31 the previous week and 40 the week before that.

Only One Dry Hole

Last week's 32 completions included only 1 dry hole, all the others having been oil wells. The 31 new oil wells included 24 that flowed naturally, 1 that was swabbed, and 6 that were pumped.

The Joiner section of the field at the southern extremity of the vast producing area and the Kilgore or middle section each furnished 12 new wells, all productive; while the Longview area at the northern end of the field had 8 completions that included the dry hole.

Of the 32 new wells last week 15 were the properties of independent companies and individuals, and 17 were major company wells.

The current comparatively small amount of drilling in East Texas is accounted for partially by the close well spacing that already prevails in the field. For the field as a whole, there is now 1 well to approximately 6 acres.

Over 21,000 Wells

The East Texas field now has somewhat over 21,375 producing wells. In the early stages of development, when East Texas had several thousand oil wells, some of the prophets were making the apparently bold prediction that the field ultimately would have 8000 or 10,000 wells. This publication about that time went so far in an article as to point out that the field seemed destined to have eventually at least 15,000 wells, and the forecast encountered considerable skepticism. Now there are nearly 50 percent more than the 15,000 wells, the field is 6 years old, and still more wells are being put down. However, the sharp curtailment of drilling in recent weeks seems to indicate that the famous field's drilling development is nearing the end.

The number of active drilling wells in the East Texas field was down to 54 at the time of a report on operations last week. Until about 6 weeks ago, the field normally had around 100 or more rigs steadily in operation.

Shreveport. — Farrell & Jones of Fort Worth last week started moving in materials for a proposed 6000-foot test on an 8000-acre block, D. H. Harp 1, SE SE 12-22n-7e, Morehouse Parish.

In West Carroll Parish, The Texas Company has leased 2000 acres in Townships 19, 20 and 21 north, Range 10 east.

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Two New Strikes

GREGORY AND PREMONT AREAS APPEAR TO HAVE PROMISE

WEEKLY STAFF REPORT

Corpus Christi.—Two new wildcat strikes were apparent in the Corpus Christi sector of the South Texas district during the week just closed. Several outpost wells to proved fields also were drilling close to the sand and were attracting considerable attention.

Casing was to be run over the weekend in Eleanor Oil Company's William Kline 1, 2½ miles south of Gregory and about four miles northwest of the McCampbell Field, in San Patricio County. While the well is a closed proposition on information, it was known that the hole was around 6600 feet and was said to have cored a well saturated sand section. It is on an interesting structure, which has been well leased by several major companies. The test is in Lot 5, Block C of the Coleman-Fulton Pasture Company subdivision.

The other apparent wildcat strike is Gist and Graddy's Bennett 1, Lot 87, Holman subdivision of Jim Wells County, two mileswest of the Premont field in Jim Wells County. The well topped a sand at 2340 feet, and after coring in eight feet ran a drill stem test that showed a blow of gas, 140 feet of drilling mud cut with oil. Cored 2 feet deeper, and still in sand, the drill stem test showed 5 thribbles of 22.6 gravity oil, 3 thribbles of fresh water and one joint of sand in 13 minutes through ¼ and ⅜-inch chokes. Casing has been set and plugs were drilled out late in the week. While no definite announcement has been made, Tom Graham is said to have completed a deal to take over the well and complete it into the tanks. The Premont field has been a rather unsuccessful development. Discovered several years ago by Magnolia Petroleum Company et al, several producers at 3400 feet were all small. A couple of wells made gassers in the 2300-foot sand. This new strike leads the way to considerable new development.

The new Flour Bluff field of southern Nueces County received a ¾-mile north extension in its second producer. At the same time, one offset to the discovery got the sand and was completing, a second was coring for the sand, and preparations were being made to start an active development campaign of this apparently important reserve. Humble Oil & Refining Company, which owns a one-half interest in the original drilling block, is to commence four wells immediately, which likely will be the beginning of a heavy drilling campaign by this concern and those holding smaller leases.

The north extension to the above field was effected by Gem Oil Company et al's Smith 1, Lot 22, Block 47, which flowed at the rate of 6 barrels of oil per hour through ⅛-inch choke under pressures of 600 and 900 pounds on tubing and casing, respectively. It is in sand at 6648-58 feet. The well took only a short while to clean and has been flowing pipe line oil since that time.

Heyser Field, Calhoun County, apparently was defined on its northwest side so far as the 5500-foot sand is concerned when Humble Oil & Refining Company and Plymouth Oil Company's P. H. Welder 3-B showed 100 feet mud and 700 feet salt water with no oil on a drill stem test at 5488-5500 feet. It is waiting on orders.

In the vicinity of Seadrift, also Calhoun County, two wells are still battling heaving shale, and apparently with considerable success. Hiawatha Oil Company's Roemer Estate 1 drilled to 7117 feet, set 8⅝-inch flush joint casing at 5910 feet and is preparing to drill out plugs. It is said to be logging 465 feet higher than another well on the trend and is being closely watched. It expects top of Frio around 7500 feet. Several miles to the southeast, Continental Oil Company's Austin 1, is waiting on cement after setting plug for whipstock at 8467 feet. The window in the casing has been cut at 8450-62 feet and the well will be sidetracked to redrill to the former total depth of 8825 feet. Several sands were encountered at this level and these sands likely will be tested for possible production. Several miles farther west, in Refugio County, Tidewater Oil Company finally succeeded in getting in machinery for Langrof 1, in the Austwell-Tivoli area. This well is supposed to be a deep test and likely will drill a section of heaving shale.

Information just compiled on the Clara Driscoll area in Nueces County shows the production around Wellington Oil Company of Delaware (was Santa Clara Oil Company) to be in a different sand than the Hiriam Reed and O. W. Killam wells about one mile to the south. The latter wells are supposed to be about 80 feet deeper in the section. In addition, their oil is 27.8 gravity with a viscosity of 44, while Wellington production is 23.4 gravity with a viscosity of 55. This brings to light the possibility of a number of sand lenses over the general structure.

Barnsdall Oil Company was coring for the 4000-foot sand late this week in Weil Brothers 1, a wildcat midway between the Saxet Heights and Saxet Field. It is being drilled in an effort to connect these producing areas.

Hiawatha Oil Company has abandoned R. H. Welder 1, on the Friedline Pasture prospect in southwestern Refugio County, after drilling to 7344 feet. The well had a number of sand sections, including a 35-foot zone just below 5700 feet. A drill stem test showed considerable oil with salt water. A second test is to be drilled in the near future.

In the White Point area, San Patricio County, Callaway et al's White Point 1 is drilling below 5150 feet, while Trinity Drillers' Mayfield 1 is down 5430 feet. Both are being closely watched.

Just southwest of the Sinton Field, also San Patricio County, Plymouth Oil Company's Welder 2-D, which drilled to 6500 feet, plugged back to 5930 feet and perforated at 5912-18 feet, where it is testing.

Laredo Failures

FIRST WEEK IN LONG TIME NO STRIKES REPORTED

Laredo.—The past week was the first in months in which no wildcat strikes were reported. Several rather interesting tests were removed from the drilling list, slowing this sort of work to one of the lowest levels in some time. Field activity, on the other hand, remained steady.

Magnolia Petroleum Company's Teal 1, Kuykendall Survey, 4 miles southwest of Crowther, in McMullen County, has been abandoned at 4059 feet. Near the Duval County line, Darby Petroleum Corporation's Hagist 1-A, has been abandoned at 2520 feet.

Webb County abandonment was R. S. Bolling et al's Fort Worth National Bank, which stopped at 2007 feet.

In Duval County, Shell Petroleum Corporation's Taylor 1, Section 214, and 1 mile northeast of the Loma Novia field, flowed salt water and gas after plugging back to 1710 feet, and perforating just above in the Cole sand. The well tested salt water in the various sands to 3125

feet. It definitely defines this field to the northeast.

Shell Petroleum Corporation's Welder 1-B, 1½ miles northwest of Loma Vista field, continues to swab after plugging back to 2856 feet. It has had several bad cement jobs and apparently the last has been a success. Pan American Production Corporation is preparing to resume work in Welder 1-H, 1 mile southwest of the same field. It is to test at 2824-63 feet.

Over in the eastern portion of the county, Thomas' Parr 1 is shut down for orders after showing salt water at 4724 feet.

Jim Hogg County's two most interesting wells late this week were Pan Ultimo's Kohler 1, coring in sand at 2430 feet. It was topped at 2413 feet. The well is 3 miles northwest of Hebbronville. Also in the northwestern portion of the county, Henry Swift is coring for the Cole sand below 1374 feet in Holbein 1.

Hill & Hill's Alexander 1, Mount Selman wildcat in Zapata County, is preparing to drill ahead at 2610 feet, where it had been temporarily abandoned. An electric formation tester was run, after which it was decided to deepen to 3100 feet.

BALCONES FAULT

San Antonio. — Several Balcones Fault zone wildcats continued to test Austin chalk showings, although they were not making sufficient amounts of oil to indicate new producing areas. The success of wildcatters in several districts has prompted an unusual amount of this type of work.

Woodward & Hardie's Devilbiss 1, near the town of Thelma and 15 miles south of San Antonio, in Bexar County, is bailing after drilling to 2284 feet. The test is a few feet from an abandoned test which showed oil about this level.

Still farther south, near Poteet in Atascosa County, Atascosa Trust's Doumch 1 is still swabbing in plugged-back hole at 3500 feet. This well showed a little oil after acidizing and has been attempting to complete for several weeks. Atascosa County's only other active operation is Helvetia Oil Company's Pratt 1, 1 mile northwest of Anchorage. It is drilling at 3576 feet, still in serpentine. Thickness of this formation rapidly is approaching the 1000-foot mark.

Two unusually important wildcats on the upper trend of the Balcones zone are progressing fairly rapidly, but have not yet reached critical depths. Paul C Teas' Vinklarek 1, on the Bastrop-Fayette County line, is down 4765 feet on a 7000-foot contract, while Red Bank Oil Company's Gramm, 6300-foot Edwards lime test in Burleson County, is making hole in shale at 4837 feet.

272 TEXAS PERMITS

Austin.—The Railroad Commission approved last week permits for the drilling of 272 new wells in Texas, 309 less than were allowed the week before.

North Texas led the list with 72 locations, including 36 in Young County, 22 in Archer County, and 11 in Jack County. West Central Texas reported 17 locations, with 10 in Shackelford County.

Southwest Texas had 50 permits,

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—A Contest wherein gridiron fans employ their skill to forecast scores of football games.

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—Prizes awarded weekly to contest winners. First prize: A Chevrolet, Ford or Plymouth de luxe sedan. 120 other prizes, including 20 Philco car radios, 50 boxes of half-dozen pairs men's or women's Real Silk Hosiery, 50 Spalding Official Footballs autographed by H. F. Sinclair and "Red" Grange.

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—Entrants must go to Sinclair stations to get free Contest Blanks.

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—Window sheets for Sinclair dealers to post scores of each Saturday's games as broadcast by "Red" Grange.

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—Station displays and other Contest tie-ins for every Sinclair dealer.

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—National magazine advertising.

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—Merchandising assistance and other dealer sales helps too numerous to mention.

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Wouldn't you like to cash in on this great Sinclair campaign? It's not too late. 'Phone your local Sinclair office at once or write Sinclair Refining Company (Inc.), 630 Fifth Ave., New York, N. Y.

SINCLAIR

with 27 in Duval County, and there were 42 from the Gulf Coast, with 10 in Nueces County.

West Texas reported 39 permits, including 16 in Winkler County and 12 in Ward County. There were 14 locations from the Panhandle.

There were 28 permits in East Central Texas, with 10 in Cass County and 11 in Cooke County. The East Texas field had 10 permits, with 5 in Gregg County, 3 in Rusk County, 1 in Upshur County, and one in Cherokee County.

The commission did not pass on the applications for exceptions to Rule 37, some 200 of which are now pending.

WILLACY WELL GOOD

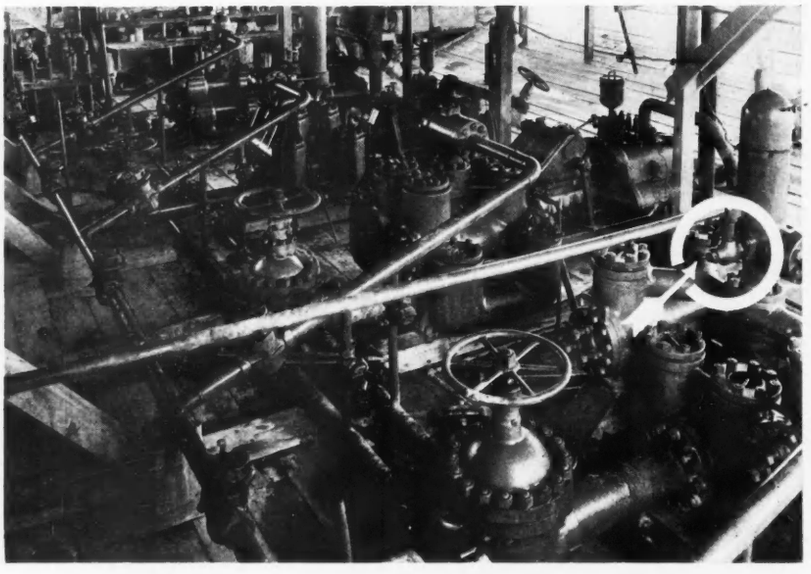
McAllen.—Pantana Petroleum Corporation's R. E. Harding 1, 7 miles north of Edinburg, in Hidalgo County, has passed the 7000-foot mark and is drilling ahead. It now is the key wildcat in the Rio Grande Valley sector of South Texas due to the fact that it is expected to core a series of oil and gas sands between this depth and 8000 feet in the Frio.

The well is in Lot 11, Block 94, Mestenas Grant, and is 650 feet from Quintana Petroleum Corporation's Engelman 1, abandoned early in the year after an accident at slightly above 9000 feet caused the hole to be junked. The Quintana well cored a number of excellent sands and this new well has been checking closely with it.

In the Mercedes area, Union Sulphur Company is drilling on its second test below 8000 feet. American Rio Grande Land and Irrigation Company 10 is coring at 8215 feet. Location has been staked for the eleventh well, which also will go to at least 7500 feet.

Shell Petroleum Corporation et al's Yturria Land & Cattle Company 1, wildcat which opened the La Sal Viejo field in Willacy County, appears to be an unusually important discovery. It continues to flow at about 150 barrels per day through ⅛-inch choke and maintains steady pressures. On a 24-hour gauge, the highest of a series of tests, the well flowed 443.52 barrels through ⅝-inch choke under tubing pressure of 1100 pounds and casing pressure of 1525 pounds. The oil is 57.8 gravity, but corrects to 56.3 gravity. The well temperature is 130 degrees, salt water content 2 percent, paraffin ½ of 1 percent. The gas volume was 8,666,000 cubic feet, making a gas oil ratio of 19,500 to 1.

IN LOOKING OVER THIS DELUXE PUMP HOOK-UP



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NOME HEARING

Austin.—A hearing on the Nome field, Jefferson County, has been scheduled for October 2 at Austin. Shell Petroleum Corporation and Sun Oil Company advised the commission that there are now two producing wells in the field and two wells being drilled. Three dry holes have been drilled also. Production in the field is from a sand found at 6000 feet.

SOUTH TEXAS

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
BEXAR COUNTY—		
May Lyden, C. F. Krause 1, S. McCullough sur, No. 10 (Von Ormy)	*	200
Raymond Pulliam, E. J. Lamb 1, 300 ft fr T. B. Slick's abnd well on L. Lamb tr, in Francisco Farias sur 15, 4 mi sw fr Elmendorf	*	3034
CALDWELL COUNTY—		
Taylor Refining Co., A. J. Miers 1, 150 ft fr nl, 375 ft nwl of 134-ac tr in Nicholas Kelley sur	*	2745
DUVAL COUNTY—		
Robert Bowles Oil Co., J. F. Welder Hrs 2, sur 102 (Seven Sisters)	85	2428
Bridwell Oil Co., Wm. Hubberd 6-D, sur 73, (Loma Novia)	200	2553
J. D. Sutherland 3, sec 122 (Hoffman)	290	2738
Cole Petr. Co., W. R. Peters 2, sur 795, (Lopez)	*	2783
Continental Oil Co., Clara Driscoll Sevier 11-A, sec 448, (Driscoll)	65	3423
Cox and Hamon, J. B. Peal 4, sur 796, (Lopez)	430	2167
Duval Oil Corp., Bishop Cattle Co. 26, sec 57, (Loma Novia)	576	2576
Bishop Cattle Co. 27, sec 57, (Loma Novia)	100	2574
Humble Oil & Refining Co., M. C. Hubberd 47-B, sur 72, (Loma Novia)	175	2762
G. Ruiz 16, sur 553, (Loma Novia)	375	2861
L. & P. T. Wright 10, sur 118, (Seven Sisters)	405	2500
Magnolia Petr. Co., Brennan-Benavides 40, Myrtle Hale subd, (Cole)	60	2787
DCRC 2, sur 99 (Piedre Lumbre)	45	1968
Hahl-Burch 6, sur 43 (Gov't Wells)	75	2402
State Neely 2, sur 383, (Lopez)	345	2519
L. B. Peal 12, sec 383, (Dopez)	480	2131
G. G. Mortimer, J. B. Peal 2-B, sur 796, (Lopez)	480	2150
Pitkin & Gholston, Bishop Land Co. 4, sur 57, (Loma Novia)	65	2585
Bishop Land Co. 5, sec 57, (Loma Novia)	64	2595

Company, Well and Location	Init. Prod. Bbls.	Depth
Reynosa Oil Co., Wm. Hubberd 7, sur 57, (Loma Novia)	192	2575
Shell Petr. Corp., V. Mendoza 16, sur 68, (Loma Novia)	485	2738
GOLIAD COUNTY—		
Jane Oil Co., O. A. Muddlo, B&B sur 25, (North Pettus)	300	3693
GUADALUPE COUNTY—		
Long & Ross, Ed Feliz 1, 1½ mi s fr New Berlin, 75-ac., V. Duran sur, 330 ft ne and nw line of tr..	*	399
JIM WELLS—		
Stanolind Oil & Gas Co., W. E. Pope 1, sec 13, (Bentonville)	555	5354
McMULLEN COUNTY—		
Darby Petr. Corp., E. R. Hagist 1-A, 330 ft nl and wl se¼ sec 13, H. & T. C. sur	*	2520
Magnolia Petr. Co., Mary Teal 1, 2310 ft el 10,297 ft nl, Wm. Kuydendal sur 4	*	4059
NUECES COUNTY—		
Gem Oil Co., J. T. Smith 1, in center of lot 22, blk 47, 660 ft nel, 330 ft sel of Encinal and Flour Bluff Gardens, 60-ac tr	575	6658
Great State Oil Corp. & Violet Oil Co., McGregor-Belk 4, (Saxet)	605	5829
No. 3-G Rand Morgan, (Saxet)	720	5820
Hiawatha Oil Co., Hutchins-Sillwell 5, H. B. Sheppherd Farm Lots, (Saxet)	805	5835
C. F. McGrew, Catherine Kelly 1, Villareal gr, (Saxet Heights)	385	4083
North Star Oil Co., Mary B. Humphrey 3, J. W. Stevens sur, (Saxet).	590	5827
Phillips Petr Corp. Rand Morgan 3, sec 405, (Saxet)	535	5837
Morgan 6, B. S. & F. sur, (Saxet).	575	5835
Port Oil & Gas Co., Gibson 2, Harbor View Est, (Saxet)	765	4069
D. W. Power & W. H. Harrison, Corpus Christi Bank & Trust Co. 1, lots 4 to 9, (Saxet Heights)	510	4075
Renwar Oil Corp. & C. Andrade, Fred Frank 1-B, Frank sur 416, (Saxet)	645	5855
J. Dunn 13, Sheppard Farm lots, (Saxet)	1025	5833
Richardson Pet. Corp., Kelly Cain 1, Russell Farm lots, (Saxet)	790	4434
Southern Minerals, Frank Bliss 10, sur 406, (Saxet)	515	5825
Frank Bliss 11, J. W. Stevens sur, (Saxet)	540	5825
Frank Bliss 15, Stevens sur, 406, (Saxet)	535	5828
Taylor Pet. Co., Corpus Christi Golf Club 1, Villereal Gr (Saxet Heights)	220	4086
REFUGIO COUNTY—		
Benedum & Trees, R. H. Welder 1, commence at w cor, Friedline pasture, thence north 53 degrees east 3888 ft, thence south 36 deg e 4443 ft to lcn.	*	7334
Quintana Pet. Corp., Tom O'Connor 38-A, J. M. Swisher sur, (Tomoconnor)	1815	5926
SAN PATRICIO COUNTY—		
Humble Oil & Refg. Co., W. M. Bevly 3, sec 35, (Plymouth)	790	5644
Plymouth Oil Co., E. H. Welder 60-C, sec 50, (Plymouth)	615	5530
WEBB COUNTY—		
Mills Bennett Prod. Co., Mauricio Lopez 7, sur 73, (Lopez)	575	2203
R. S. Bolling, Ft. Worth Nat'l Bank & Trust 1, 660 ft nel, 330 ft nwl of blk 4, sur 466	*	2007
G. G. Mortimer, J. B. Peal 4-A, sec 72, (Lopez) M. Vela 6, sur 114, (Lopez)	430	2208
Porter & Blanchard, S. Benavides 2, Hale subd, (Cole)	180	2904
S. Benavides 1-B, Hale subd (Cole)	430	2897
H. M. Reed, S. Benavides 2, Arispe Gr, (Cole)	225	2895
Smith & Hammill, S. Benavides 6, Arispe Gr, (Cole)	690	2940
S. Benevides 8, Arispe Gr (Cole)..	705	2935
Superior Oil Co., W. C. Billings 16, sec 109, (Lopez)	575	2280
ZAPATA COUNTY—		
George Buck, A. P. Haynes 4, Comitas and Villa Gr, (Comitas)	30	944
Gilcrease Oil Co., A. P. Haynes 11-C, Comitas & Villa Gr, (Comitas)	40	925
G. E. Heye, M. Garza 1, Zorre Ranch (Escobas)	25	1140
Mid-Continent Petr Corp. A. P. Haynes 5, Comitas & Villa Gr, (Comitas)	18	829
Nordan & Morris, A. P. Haynes 10-A, Comitas & Villa Gr, (Comitas)	65	1031
J. P. Nash Trustee, A. P. Haynes 20, Comitas Gr, (Comitas)	25	920
Upchurch & McKay, A. P. Haynes 10, Comitas & Villa Gr, (Comitas)	30	987

*Failures; †Junked; ¶Million cu. ft. gas.

COCKFIELD TESTS

Find showings in Jackson, Victoria counties

Beeville.—Trend of Cockfield production in South Texas is being pushed farther east to tie into the very definite trend already established on the eastern Texas Gulf Coast. Two wildcats were being watched closely late in the week as possible openers of new producing areas in this sector of the district.

Plymouth Oil Company picked up a sand at 5668-5727 feet, ran a seven-minute drill stem test from 5666-5727 feet and developed 650 pounds gas pressure. The well likely will be cored slightly deeper and tested again. This test is No. 1 J. J. Welder, S. Belding survey, Abstract 141, Victoria County, and is northeast of Nursery. It is near the DeWitt County line and considerable distance from any production. The showing likely is in the Cockfield.

Across the county line into Jackson County, Steinberger Petroleum Corporation is coring deeper in Drushel 1 before making a production test. The well, located on the southeast flank of the Edna gas field, has cored a series of sands to 7180 feet, where it is believed to be in the upper phase of the Cockfield. The most recent sands have been at 6425-40 feet, showing a little oil; 6499-6520 feet, showing gas; 6801-15 feet, showing oil and gas; 6925-37 feet, showing oil; 7158-80

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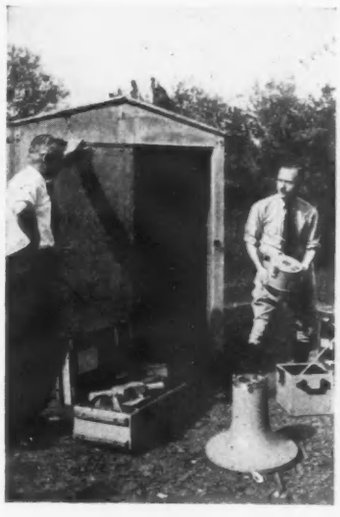

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feet, showing both oil and gas. Casing was set atop the last sand where an effort will be made to complete.

The California Company is rigging up after pulling in derrick on Langrebe 1, John Hancock Survey, in the northern portion of Goliad County near the DeWitt and Victoria County lines. This well drilled to 5052 feet, but had an accident after running casing to 4975 feet. It has sand at 4800-7 feet; sand 4944-63 feet and sand and shale 5035-50 feet, all in the upper Yegua and all showing some saturation.

Just southeast of the discovery well of the Plummer Field, Bee County, D. R. Semmes is coring for the Pettus sand around 3000 feet in T. M. Plummer 1. The well is attempting to establish oil production on this gas structure.

SEEK INCREASE

Austin.—An increase of 2500 barrels daily in the allowable for the Hastings field, Brazoria County, was requested at a hearing before the Texas Railroad Commission last week. Royalty owners and operators joined in the application.

On September 1, the allowable for the field was 5717 barrels and there were 92 producing wells with an average allowance of 83.15 barrels.

Everett Meaders of Stanolind Crude Oil Purchasing Company, told the commission that his company was willing to buy the oil. E. O. Buck, consulting engineer for the royalty owners and T. H. Andrews, Stanolind petroleum engineer, sand that the oil could be produced from the field without waste. The application was taken under advisement by the commission.

HIGHER OIL TAX?

Austin.—The Texas Legislature will convene September 28 for the purpose of raising taxes sufficient to defray the cost of old age assistance.

Governor Allred has indicated that his message to the legislature will include a recommendation for an increase in the gross production tax on crude oil and other natural resources.

Most observers are of the opinion that such an increase will be approved by the legislature since the oil industry especially is prosperous and there is no difficulty expected from a small increase.

Reports from authentic sources, however, indicate that the governor will urge an increase of 37½ percent of the gross production tax.

Shreveport, La.—Construction of a 15,000,000 cubic foot daily capacity gasoline absorption plant in the Sligo gas field of Bossier Parish by Arkansas-Louisiana Gas Company was begun last week. The daily output is expected to be about 6000 gallons daily.

The plant is located on 10-acre lease in Section 7-17n-11w. The plant is expected to be completed by January.

Forty percent of all the gasoline consumed by motor vehicles is used by trucks and buses.

Extend Fairbanks

WELL GAUGES 299 BARRELS FIRST 14 HOURS ON CHOKE

WEEKLY STAFF REPORT

Houston.—The Fairbanks field, Harris County, was extended last week when Stanolind Oil & Gas Company completed Carpenter 1, F. Fry Survey, which flowed 299 barrels in 14 hours through ¼-inch choke from the Cockfield formation at 6860 feet.

The 36.9 gravity pipe line oil flow came after casing was perforated with nine shots from 6831 to 6834 feet. The tubing pressure was 1850 pounds and the casing pressure 2150 pounds. Gas/oil ratio was 2300 to 1.

After making a drill stem test from 6831 to 6834 feet, the well showed 14 joints of oil, 4 joints of oil and mud, and 3 joints of mud and wash water. While flowing the bottom-hole pressure was 2798 pounds and the shut-in bottom-hole pressure was 3026 pounds. The drill stem test was made in 8 minutes through ⅜-inch choke on top and ¼-inch choke on bottom. The crew started washing the well September 24.

Carpenter 1 is the second well the company has completed in the Fairbanks field. It is said to be approximately 40 feet higher than the discovery well on geological markers.

Stanolind Oil & Gas Company's Angello Candelari 1, Reels & Trobough prospect, in the Reels & Trobough Survey, Harris County, was drilling at 5140 feet in shale in the Frio formation at the close of the week, and is supposed to be 600 feet in the formation. The well showed salt water sands in the upper formation and yet on geological markers it is supposed to be running 300 feet higher than other wells drilled in the area. This is Stanolind Oil & Gas Company's seventh wildcat to be drilled in the Texas Gulf Coast, and six of the seven wildcats have resulted in discovery wells.

On the southwest side of the Amelia field, Jefferson County Humble Oil & Refining Company killed Tyrell Combest 1, west offset to Peveto 1, A. Savery Survey, after flowing at the rate of 5 barrels per hour from the Frio formation at 6797 feet. The well had a high gas/oil ratio.

The hole was drilled to 6779 feet in shale with top of the oil sand logged at 6735 feet. Seven-inch casing was cemented at 6771 feet and 2½-inch tubing hung at 6635 feet. The well came in flowing through ¼-inch choke.

North of the Amelia field, Glenn H. McCarthy's Longe 2-A, 165 feet southeast of Longe 2, which blew out, cratered and caught fire, was preparing to drill ahead below 1603 feet at the end of the week after making a drill stem test from 6085 to 6099 feet. The test was made in 8 minutes through ¼-inch and ⅜-inch choke and showed 1500 pounds gas pressure. Five-inch casing was cemented at 6103 feet.

The same operator's Kilgore 3, east of the discovery well at Cotton Lake, Chambers County, was waiting on cement September 25 after the well had been drilled and cored to 6412 feet. Five-inch casing was cemented at 6350 feet. Salt water sand was reported at 6382 feet. From 6338 to 6350 feet sand was cored which showed 4 feet oil saturation and balance salt water.

North of production at Anahuac in Chambers County, Humble Oil & Refining Company encountered salt water again on White B-5, J. McGahey Survey, and abandoned at 6925 feet. After drilling cement plugs to 7224 feet, the hole was plugged back to 7047 feet and a drill stem test made from 6960 to 7047 feet. The test was made through ¼-inch choke and the testing tool was open 3 hours. No pressure was registered, and 270 feet of mud, 3150 feet of oily salt water and 3000 feet of salt water was recovered.

Humble Oil & Refining Company

TEXAS GULF COAST

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
AMELIA—		
Humble, Tyrell Combest 1	192	6779
ANAHUAC—		
Humble, Hebert Broussard 7	720	7085
Middleton 11	600	7082
White 13	696	7085
Sun, White 21	650	7117
BATSON—		
Gulf, Wing 177	20	600
BOLING—		
Flo Boots Oil Corp., Chas. Davis 1	*	lcn.
CLAY CREEK—		
Sun, Grimm 2	*	1762
DICKINSON—		
Ken Ben Oil Co., Stewart 2	124	8515
ESPERSON—		
General Crude, Davis 19	*	4358
Esperson 30	*	4075
HASTINGS—		
Stanolind, Curkett 2	120	6128
LOUISE—		
Pure, Jones 2	¶2-12	5156
MARKHAM—		
Harrison & Abercrombie, Kountz 8	240	4080
ORCHARD—		
Gulf Oil Corp., Moore 6-A	*	2240
RACCOON BEND—		
Humble, Remmert 4	145	3355
SOUTH HOUSTON—		
Stanolind, Holland & Price 2	120	4815
Stanolind, Schwartz 3	443	4015
Wyndelts 2	72	3960
TOMBALL—		
Humble, Ayers 1	216	5569
Jno. Holdereith 3	456	5557
Texas Co., Doughtie 1	¶1	5565
VAN VLECK—		
Skelly Oil Co., B-10	440	7490
Metzler 2	250	8261
HARDIN COUNTY—		
Republic Prod. & Houston Oil Co., Brooks 1, Silsbee area, J. W. Brooks sur	*	6840
MATAGORDA COUNTY—		
Cockburn Oil Corp., Hawkins 8, Sheppards Mott area, D. McCarthy sur	*	5385
ORANGE COUNTY—		
Coker Oil Co., Mansfield 1, s of Vidor, J. W. Hill sur	*	2600
Tide Water, Brown Fee 1-A, Cow Bayou prospect, W. Dykes sur	*	7867
POLK COUNTY—		
Dick Schwab, Kirby Lbr. Co. 2-A, Ace area, P. A. Sublett sur	*	4863

*Failures; †Junked; ¶Million cu. ft. gas.

PERFECT PERFORMANCE!

COMPLETE TEXAS DRILLING RECORD

COUNTY	INTERPRETATION	WELL TESTED	CORRECT ANALYSIS
Chambers	Structure Discovered and Recommended, 1935	Opened Cotton Lake Field	Yes
Morris	Area Condemned	Dry	Yes
San Jacinto	Area Not Recommended	Dry	Yes
Wharton	Structure Discovered and Recommended, 1936	Opened Magnet Field	Yes

TWO DISCOVERIES . . . NO FAILURES . . . DISCOVERY RATIO 100%
FOUR CORRECT INTERPRETATIONS . . . NO ERRORS
INTERPRETATION RATIO 100%

AMERICAN SEISMOGRAPH COMPANY
GEOPHYSICAL SURVEYS
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completed White 13, J. McGahey Survey, at Anahuac. The well made 29 barrels of 34 gravity oil per hour through ¼-inch choke with a tubing pressure of 1125 pounds from 7085 feet. The company also completed Broussard 7, flowing at the rate of 30 barrels per hour through ¼-inch choke with a tubing pressure of 1150 pounds from sand at 7085 feet.

Harrison & Abercrombie's Armstrong Plantation 1, the deepest commercial producing well in the world, Old Ocean field, Brazoria County, is flowing 198 barrels of 54 gravity oil from 9963 feet in the Frio formation. Tubing pressure is 3500 pounds.

In Hardin County, Republic Production Company and Houston Oil Company's Brooks 2, relief well drilling to kill Brooks 1, which blew out, caught fire and cratered, was waiting on cement to set at 7026 feet with the bottom of the hole at 7042 feet. The deviated hole is reported to be only four feet from the bottom of the hole made by Brooks 1. Brooks 2 set 20-inch casing at 63 feet, 16-inch at 120 feet and 10-inch casing at 1509 feet. The crew started deviating at 2099 feet. Gas sand was cored from 6904 to 6911 feet and from 6921 to 6933 feet. At 7011 feet the crew ran an electrical logging device. Oil sand was logged from 7011 to 7018 feet. The operators should start pumping mud into Brooks 1 the coming week to kill Brooks 2.

About 660 feet north of the discovery well at Ace in Polk County, Dick Schwab's Kirby Lumber Company 2-A, P. A. Sublett Survey, was abandoned at the end of the week after flowing 8 barrels of salt water per hour from the Cockfield formation at 4863 feet. Five and half-inch casing was perforated from 4800 to 4815 feet with 12 shots. The well came in flowing salt water, trace of oil and a small amount of gas. The tubing pressure ranged from 0-50 pounds and the casing pressure was 600 pounds.

South of production at Dickinson (Gillock), Ken Ben Oil Company completed Stewart 2, W. K. Wilson Survey, for 124 barrels daily through a ¼-inch choke with a tubing pressure of 1500 pounds and a casing pressure of 1800 pounds. The well was completed after the crew perforated casing with 60 shots from 8496 to 8515 feet.

Pan American Production Company's Craig 1, east of production at Gillock, W. K. Wilson Survey, was waiting on cement to set after plugging back to 8300 feet. An oil sand which showed 11 ohms on an electrical logging device was found from 8300 to 8325 feet. If the well is a commercial producer it will be a new sand for this area.

At Garwood, in Colorado County, Sterling Oil & Refining Company made a drill stem test on South 1 at 6125 feet and were preparing to make another at the end of the week. On the drill stem test on South 1, I. & G. N. Survey, Section 41, the tool slipped to 6120 feet after attempting to make the test of sands showing oil from 6113 to 6125 feet. The testing tool was open 9 minutes and showed 1300 feet of oily mud. Top of the sand was found at 6120 feet.

On the west side of the Hastings field, Brazoria County, Stanolind Oil & Gas Company completed Curkeet 2, H. & T. B. Survey, Section 35. The well came in flowing 5 barrels per hour from 6128 feet through a ¼-inch choke with a tubing pressure of 180 pounds and a casing pressure of 750 pounds.

The third operator to enter the Hastings field is Walter Gholston et al, who has made location for Fee 2. It is 200 feet from the southwest line and 350 feet from the northwest line of lease in the B.B.B. & C. Survey, No. 6. The well is on the east side of the field.

Another failure was reported for the Sheppards Mott area, last week when Cockburn Oil Corporation abandoned Hawkins 8, D. McCarthy Survey, Matagorda County, in heaving shale at 5385 feet.

Tide Water Oil Company and Pan American Production Company abandoned Brown Fee 1-B on the Cow Bayou prospect in Orange County. Fee 1-B, W. Dykes Survey, cored salt water sand from 7801 to 7867 feet.

Shreveport.—A. C. Glassell's Frost Lumber Company 1, Mary S. Potts Survey, Panola County, Texas, was coring ahead last week after recovering 8 feet of a 15-foot core from 5641 to 5656 feet, the core showing gas and having a distillate odor.

A test completed several years ago by Chapman and associates in Pickering Lumber Company 1, C. E. Henry Survey, Shelby County, 700 feet from H. A. Stebbinger's Pickering Lumber Company in the same survey, that recently showed for a gas-distillate producer at 5029 feet in oolitic lime, was treated with acid last week and when opened showed gas and some oil, but whether it was oil put in with acid was not immediately determined. This well, which had total depth of 3840 feet, furnished gas to several towns for several years and then bridged several months ago.

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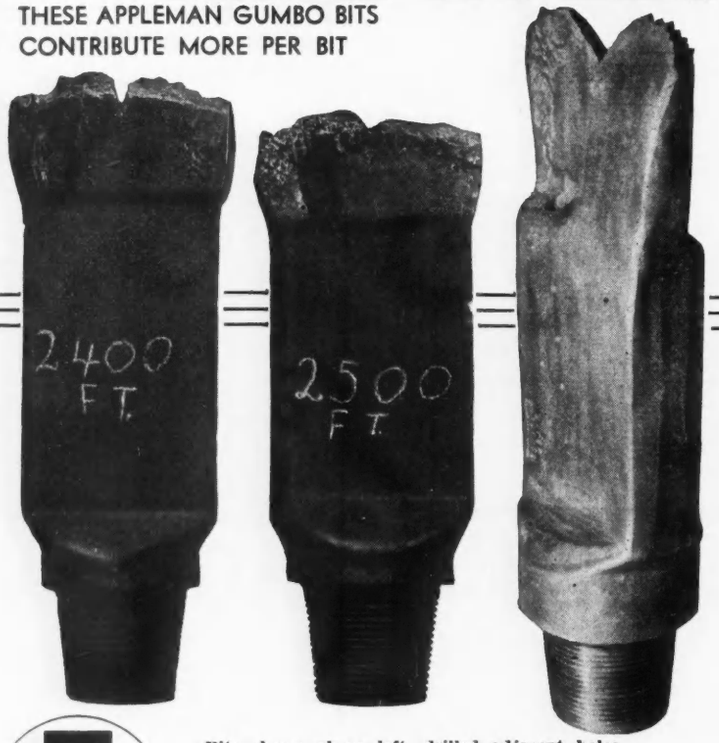
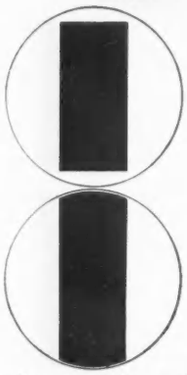


Bits shown above left, drilled adjacent holes in East Texas Field. Bit at right drilled 3,050 feet in 49 hours in Tomball, Texas, field.



Top—Former body section. Lower—Present body section. Showing relation to hole diameter. Present body section positively eliminates reaming.

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BEAUMONT, TEXAS

DEEP DRILLING
Another Louisiana Coast test below 10,000 feet

Lake Charles.—The deep drilling trend in the Louisiana Gulf Coast continues to progress. Last week The Texas Company's Rigoletts 5, Section 29-17s-24e, south of production at Lafitte, Jefferson Parish, became the eighth well in the area to penetrate formations below 10,000 feet. The well was drilling at 10,065 feet at end of the week in hard shale with streaks of lime and showing oil. Top of the oil show was encountered at 10,058 feet. An odor of oil was encountered from 10,048 to 10,052 feet.

Lafitte was considered the deepest producing area in the Gulf Coast until recently when Harrison & Abercrombie took that honor by completion of Armstrong Plantation 1 at Old Ocean, Brazoria County, Texas. Armstrong Plantation 1 was completed at 9965 feet for a commercial producer. The Lafitte field has been producing from the 9600-foot horizon.

While Old Ocean holds the distinction today of being the deepest commercial producing field in the world, it is not likely that it will continue to do so, for among the increasing number of 10,000-foot test there probably will be a producing well before long in the South Louisiana area.

Lacking only a few feet of reaching the mark set by Harrison & Abercrombie, The Texas Company's L. L. E. Lafitte 5, north of production at Lafitte, Section 20-17s-24e, was setting casing below 9927 feet to make a production test at the end of the week. Oil sands were cored from 9876 to 9883 feet, 9885 to 9893 feet and from 9912 to 9927 feet. Another sand with an odor of oil was found from 9750 to 9762 feet.

At Abbeville in Vermilion Parish, Continental Oil Company also is seeking deep production. Alvin Hebert 1, Section 20-12s-3e, a week ago blew out of control for five minutes before the blowout preventer could be closed. A sand was encountered at 11,727 feet and at 11,732 feet while circulating for cuttings the test blew out.

At the end of the week the crew was circulating the hole with oil to release the pipe stuck in the hole. It is believed that a reamer is stuck at 11,674 feet. The reamer was placed in the hole when heaving shale was encountered. Some are of the opinion that the blow out was due to the heaving shale, while others believe it to be gas. The well is showing no pressures and a 16-pound mud was pumped into the well to kill it.

On the southwest side of the Jennings field, Acadia Parish, Superior Oil Producing Company's Leckelt 1, Section 42-9s-2w, after running an electric logging device was reaming to set casing at 6380 feet to test oil sands logged from 6352 to 6367 feet. The well is only a short distance from 400 to 500-foot production, but is approximately 4500 feet northwest of Shell Petroleum Corporation's Conover 1, which extended the field over 2000 feet southeast sometime ago. Leckelt 1 is supposed to be in the same sand that Conover 1 produced from, at 7530 feet. If Leckelt 1 is in the same sand the latter well is over 1000 feet higher than the former test. Leckelt 1 cored oil sands at 6352 to 6367 feet. If the well is a commercial producer it will be the third field for Superior Oil Producing Company to produce from since entering the Gulf Coast.

Magnolia Petroleum Company has made another location east of the Big Lake gas field in Cameron Parish. Raymond LeBleau 1 is 330 feet east of the southwest corner of an 80-ac tract in Section 13-12s-8w.

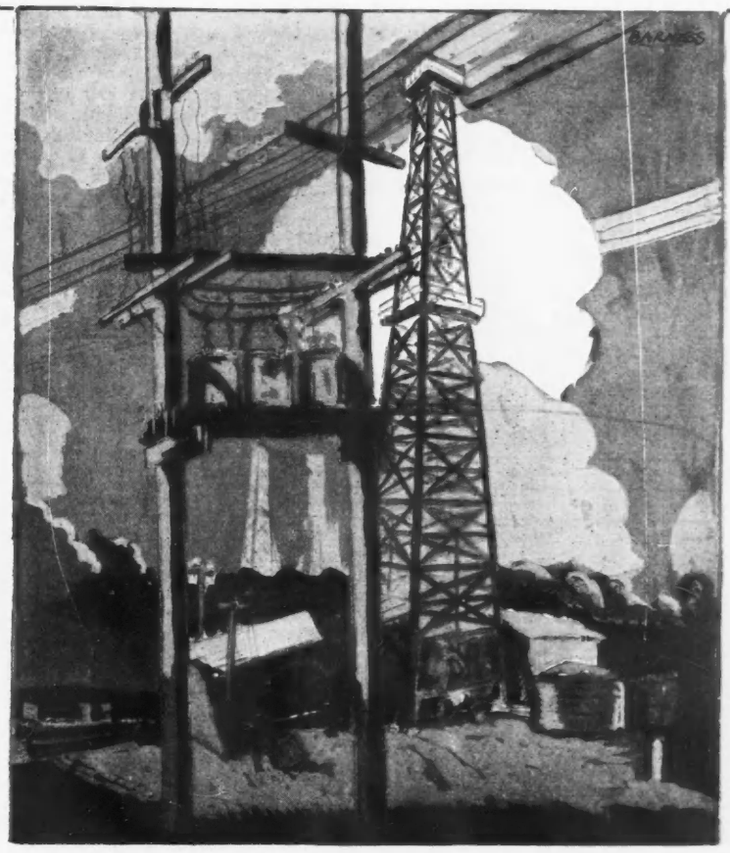
In West Feliciana Parish, R. L. Morris et al have made location for Clack 1, It is 650 feet west and 900 feet south of the most northerly corner of Section 103-1s-4w.

On the southwest side of Gillis field, Calcasieu Parish, Union Sulphur Company abandoned Green Acres 1, Section 11-9s-8w, at 6464 feet after making a drill stem test and showing 8 fourbles of salt

SOUTH LOUISIANA
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
GILLIS—		
Union Sulphur, Barbee Estate 5 (wo)	1030	6403
Barbee Estate 9	624	6767
Green Acres 1	*	7659
JENNINGS—		
Port City Oil Co., Haywood 19	75	2213
LEEVILLE—		
Texas Co., L. L. E. Leeville 55	2048	5010
SULPHUR—		
Union Sulphur, Fee 833	400	2982
VINTON—		
Vinton Pet. Co., Fee 1	*	4761
TERREBONNE PARISH—		
Humble, Continental Land & Fur Co. 1, Castell prospect, 30-17s-14e	*	10,254

*Failures; †Junked; ¶Million cu. ft. gas.



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water with a little gas. The hole was drilled to 7659 feet and plugged back a number of times before it was plugged at 6464 feet.

On the same side of the field as Green Acres 1, Union Sulphur Company made location for Lyons 1, 750 feet southwest of State 8. The well is 188 feet south and 920 feet east of center of Section 11-9s-8w.

Union Sulphur Company worked over Barbee Estate 5 on the west side of the Gillis field and completed it in a new producing sand. The test was producing from sands at 6767 feet and also at 6413 to 6419 feet. The hole was plugged back to 6409 feet, and 5-inch casing was cemented at 6394 feet. Sand showing oil was encountered from 6396 to 6403 feet. Barbee Estate 5 came in flowing at the rate of 1030 barrels of fluid daily, showing 10 percent wash water through a 16/64-inch choke with a tubing pressure of 900 pounds. Barbee Estate 5 is one of the best wells completed in the Gillis field.

South of the Gillis field in the graben between the Gillis and English Bayou fields, Calcasieu Parish, Union Sulphur Company was preparing to complete Cole 2, Section 12-9s-8w, at 5257 feet. Sand showing oil was topped at 5254 feet and on a drill stem test 120 feet of mud, sand and oil were recovered. Seven-inch casing was cemented at 5254 feet.

The eastern portion of the English Bayou field, Calcasieu Parish, appears to be defined. Union Sulphur Company's Kauffman 2, Section 13-9s-8w, evidently cut a fault and was drilling in shale at 7123 feet, having missed the sand at 7050 feet

Rodessa Gas Problem

COMMISSION MAY SET ALLOWABLE FOR EACH WELL

NORTH LOUISIANA

WEEKLY STAFF REPORT

Shreveport.—Eleven new wells were completed last week in Rodessa, 7 on the Cass County side of the field and 4 on the Louisiana side. Meanwhile, Conservation Commission officials were busy checking Rodessa producers on the Louisiana side to see that they came within the gas-oil ratio prescribed by Conservation Commissioner William G. Rankin, which limited oil producers to 3,000,000 cubic feet per day and gas-distillate producers to 6,000,000 cubic feet daily.

Due to the engineering problems that have arisen in some parts of the field, especially in thickly drilled areas, a close study has to be made of each individual well, and it is expected that the commission will be inclined to handle each well as its individual problems present themselves. Eventually it is regarded as likely that an individual allowable for each well that needs attention to its oil-gas ratio will be determined.

The townsite part of the field in Section 23-23n-16w, where wells have been drilled on small tracts, is one of the knottiest problems in the solution of the gas-oil ratio matter.

The northeast edge of the field held the most interest during the week, with two tests watched closely for their bearing on the outcome of production in that part of the field. Red Iron Drilling Company's Means 1, SW NE 9-23n-15w, ½ mile northeast of production, logged Hill sand from 5801 to 5822 feet; elevation is 216 feet. Later the test topped the Gloyd at 5917 feet and was reaming to bottom after getting 15 feet of saturation to 5933 feet. An edge well to the north in the northeast part of the field gave promise of being productive in the Hill sand which has yielded several good wells in that part of the field. This test is Roger Wolf's Fitts 1, SW SE NE 8-23n-15w, which cored 12 feet of saturation in the Hill sand from 5948 to 5960 feet.

Early tests northeast and south of production limits in the field were indicated last week. In Marion County, south of the Cass County, Texas, part of production, W. F. Lacey announced plans to drill Lizzie Henderson 1, R. Beiington Survey, on a 35-acre tract, and northeast of production in Miller County, Arkansas, H. H. Temple announced plans to drill on Westmoreland 1, SW of center of fractional east half of 15-20-27.

One mile from nearest production in the southwest part of the field in Cass County, H. L. Hunt Inc. started moving in materials for I. N. Shelton 1, James Davenport Survey, on a 220-acre tract. Other Cass County locations were: Magnolia Petroleum Company's Meda Green 4, James Davenport Survey, and Mary Rives 7, 8 and 9, John Collum Survey. Phillips Petroleum Company made locations for Aline Skinner 1 and 2, 160-acre tract in the SFIW Survey, and R. W. Norton made location for Moore 2, William R. Meyers Survey.

Outside of production in the northeast part of the field, W. J. Anson made location for Spearman 1, Section 14-23n-15w, and in the northeast part of the field United Gas Public Service Company made location for N. S. Spearman 6, Section 7-23n-15w.

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SHREVEPORT, LOUISIANA

TRADE PELCO MARK

Lake Charles—Houma—Converse
Rodessa—Monroe—Turnertown
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The eastern flank of the shallow Homer oil field, Claiborne Parish, which produces from the Nacatosh and Blossom, continues to be the scene of considerable leasing for deeper producing possibilities.

Two companies recently leasing in that area in township 21 north, range 7 west are Arkansas-Louisiana Gas Company and Shell Petroleum Corporation. Farther to the east in this parish, Standard Oil Company of Louisiana has been taking some leases in township 21 north, range 4 west, and this company is adding to its block in township 19 north, range 7 west.

In Bienville Parish around townships 17 and 18 north, ranges 5, 6 and 7 west, Arkansas - Louisiana Gas Company and several independent operators have been taking leases. In the same parish, Gulf Oil Corporation has taken some leases recently in township 16 north, range 7 west, and Shell Petroleum Corporation has been leasing in township 15 north, range 6 west.

In Bossier Parish, between the Elm Grove and Bellevue fields, and in township 15 north, range 11 west, Rodessa Oil & Refining Company has taken a few leases and in the same parish in township 23 north, range 12 west, Shell Petroleum Corporation took 160 acres.

W. J. Hunter has practically completed a 7000-acre block in township 16 north, range 15 west, south Caddo Parish, and has signed an agreement to drill within 4 months.

In Franklin Parish, L. M. Calhoun and associates who have a 25,000-acre block around township 12 north, range 7 east, plan to start a 4500-foot test by December 1.

In Morehouse Parish, Farrell and Jones have made location for D. H. Harp 1, SE SE 12-22n-7e, on a block which has been gone over with shooting units. In Ouachita Parish, in township 16 and 17 north, range 1 east, where there has been some recent geophysical work, Albert

NORTH LOUISIANA
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CADDO PARISH (Rodessa)—		
McAlester Fuel Oil Co., Tyson 2, 22-23n-16w	2000	5990
Phillips, Adams 4, 17-23n-15w	2000	6060
United Gas, I. L. Young 4, 28-23n-16w	2000	5954
N. S. Spearman 5, 7-23n-15w	1500	6077
DE SOTO PARISH—		
I. W. Adams, B. F. Jenkins 1, 3-12n-12w	*	2554
Jal Drlg. Co., Scales A-8, 36-13n-12w	100	2460
SABINE PARISH—		
Massa & Aiken (formerly Claude Smith), Whitney Corp. 1, 19-10n-13w	*	3436
UNION PARISH (Monroe)—		
Interstate Nat. Gas Co., Fee 52, 32-21n-4e	¶10½	2139
WEBSTER PARISH (Sibley)—		
J. P. Evans, T. H. Johnson 1, 36-18n-9w	¶60	5781
TEXAS		
CASS COUNTY (Rodessa)—		
Magnolia, Rives 3, Jno. Collum sur.	1500	6068
Rives 4, Jno. Collum sur	1500	6047
Annie Hall 3, Jas. Young sur	1500	6097
Annie Hall 4, Jas. Young sur.	1800	6090
Annie Hall 5, Jas. Young sur.	1800	6070
Annie Hall 7, Jas. Young sur.	1500	6070
Superior, Chew A-4, Jas. Davenport sur	2000	5992

*Failures; †Junked; ¶Million cu. ft. gas.

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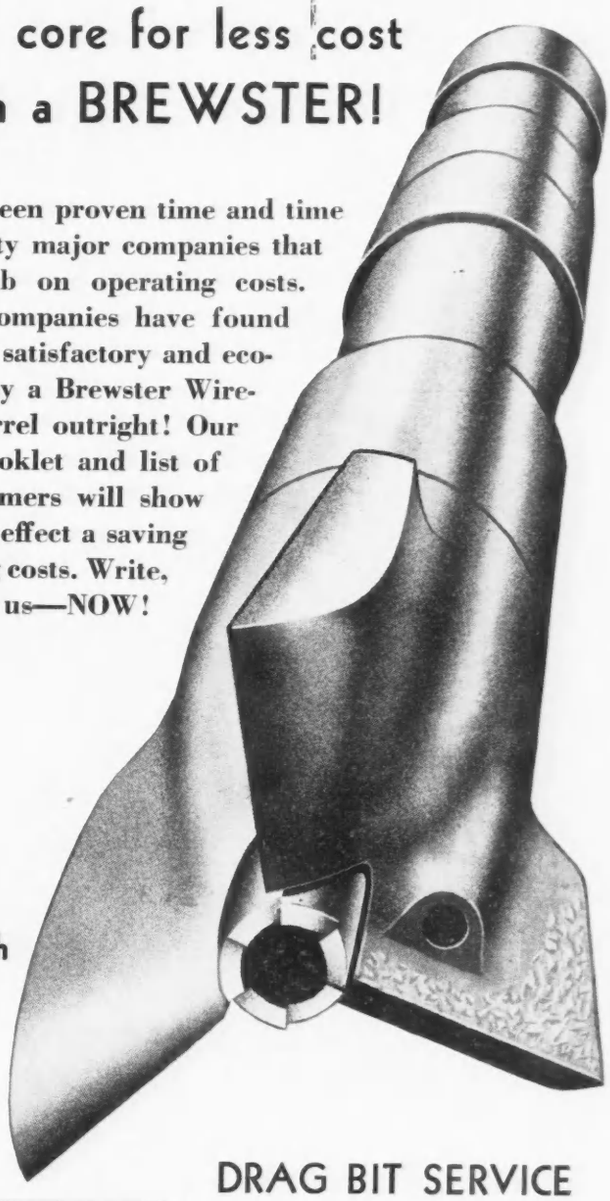

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Taylor of Texarkana, is taking leases. In Richland Parish, Gulf Oil Corporation has a 14,000-acre block in township 17 north, range 8 east.

Carter Oil Company's seismograph unit has been moved back to the Cotton Valley field, Webster Parish.

ARKANSAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
UNION COUNTY (Urbana)—		
McCresslenn Oil Co., Atkins 3, 3-18-13	115	3574

*Failures; †Junked; ¶Million cu. ft. gas.

SNOW HILL WELL
Probably last to be drilled in salt area

WEEKLY STAFF REPORT

El Dorado, Ark.—Phillips Petroleum Company's Arnold 1, NE SW 27-15-15, Ouachita County, Snow Hill district, last week was completed at top of the Permian lime, after plugging back to 5175 feet and having casing perforated. This test was taken to 5708 feet into rock salt of the Permian, the salt having been topped at 5630 feet; elevation is 207 feet.

This probably will be the last completion for some time at Snow Hill, as no new locations have been made there since salt water began to appear with the oil and gas. Arnold 1 gauged 90 barrels of oil and 3,000,000 feet of gas in a 24-hour gauge.

The following companies have taken acreage near Erwin & Leach's Red River Farms 1, Section 2-17-26, Miller County: Delta Drilling Company, The Hunter Company, The Texas Company, Magnolia Petroleum Company, and North American of California.

Hempstead County, with four active operations added another location last week: L. S. Hays' State of Arkansas 2, SWc 18-14-25, which will be a 3000-foot test. Joe Strahan made location for Dierks Lumber Company 1, Section 21-12-28, Little River County.

Benedum & Trees Oil Company's Groves 1, SW SW 10-14-20, Nevada County, deep test near the old Irma field, is drilling ahead below 1400 feet after testing 20 to 25 million feet of gas in a drill stem test from 1225 to 1285 feet. No casing was set.

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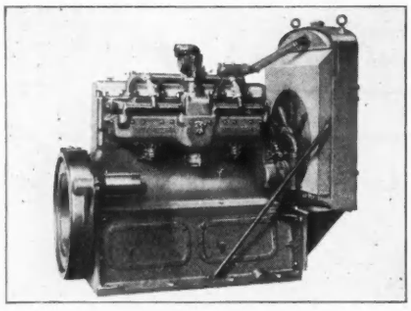

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WAUKESHA MOTOR COMPANY
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WAUKESHA ENGINES

50 MILLION GAS
State's well at Jackson opens new production

Jackson, Miss.—State of Mississippi's Fee 3, Section 25-6ln-1e, Hinds County, which apparently opened the shallow Wilcox horizon as productive in the Jackson gas field, was estimated last week as a possible 50,000,000-foot daily capacity. It has been producing through 1¼-inch tubing with rock pressure of 475 pounds from 1107 feet; 10-inch casing was cemented at 1057 feet. With a 62-foot liner in use, there was still considerable open hole.

State of Mississippi last week made location for Fee 4, located 800 feet north and 600 feet west C N½ 35-6n-1e, and is moving in rig after derrick was completed.

C. B. Pennington of Baton Rouge has assembled approximately 20,000 acres of leases in Townships 2 and 3 North, Range 2 West, Wilkinson County, Southwest Mississippi. The leases were secured by H. C. Leak.

Independent Exploration Company, reported working for Tide Water Oil Company, has completed four weeks of shooting work in the western part of Wilkinson County. A torsion balance crew is reported working in Franklin County, South Mississippi.

31 PERMITS

Shreveport.—Thirty-one drilling permits were authorized last week by the minerals division of the Louisiana Conservation Commission. Of these 14 were for North Louisiana parishes divided as follows: Caddo, 9, of which 6 were in Rodessa; DeSoto, 2; Grant, 1; La Salle, 1; and Webster, 1. Those in South Louisiana were in the following parishes: Acadia, 3; Calcasieu, 4; Cameron, 4; Plaquemines, 1; St. Bernard, 2; St. Mary, 1; Terrebonne, 1; and West Feliciana, 1.

Lance Creek Producer

FLOWS 217 BARRELS HOUR WITH LOW GAS-OIL RATIO

ROCKY MOUNTAIN FIELDS

WEEKLY STAFF REPORT

Casper, Wyo.—Flowing 217 barrels per hour and 4,500,000 cubic feet of gas daily, Continental Oil Company's Schuricht 4-A, C NE SE 6-35n-65w, was brought in through the casing for one of the best oil-gas ratio completions in the Lance Creek field, Niobrara County, eastern Wyoming. The well is an inside location. Production was developed in the basal Sundance sands, with the 7-inch production casing set at 3847 feet. The well went out of the Sundance at 3946 feet and drilled to 3950 feet in the red beds.

Three other wells started in the field and three wells were near completions. Continental Oil Company is building rig for Schuricht 2-B, SE SW SE 6-35n-65w, a north offset to MacKinnie Oil & Drilling Company's recent south extension to the field, and for Dielman 2-A, NW NE NE 7-35n-35w, an east offset to the MacKinnie well.

Continental Oil Company's Otto Rohlff 7, C NW SW 32-36n-65w, is swabbing and cleaning and started off at 20 barrels per hour through the 7-inch casing at 3845 feet. The well had basal Sundance at 3853-3944 feet, with total depth at 3950 feet. Emil Rohlff 1 of Continental Oil Company, C SL SE NW 32-36n-65w, topped Third Sundance at 3879 feet, and is coring at 3936 feet.

Argo Oil Company's Elliott 5, C NW NW NW 5-36n-65w, is rigging up rotary. Ohio Oil Company's Elizabeth Lamb 1, C NE NE 5-35n-65w, an old Dakota producer deepening to the Sundance, is at completion stage. The well cored saturation in third Sundance at 3775-3804 feet and in the fourth sand at 3839-3995 feet, and was reaming out cavings to bottom at 4010 feet in the red beds. Ohio Oil Company's Richards & Comstock 3, 220 feet from the north line and 630 feet from the east line of 32-36n-65w, is coring in shale break at 3853 feet below the third Sundance logged at 3773-3810 feet.

J. M. Huber Corporation is moving in rotary for Joss 2, NE SW 6-35n-65w, a north offset to A. B. Cobb and Holly Development Company's Novak 1, NE SE SW 6-35n-65w, an outside location on the west side of the field, which is drilling at 925 feet.

A mile south of the nearest Lance Creek production, Adams-Louisiana Company of Houston is waiting on rotary for Spaugh 1, C NW NE 18-35n-65w, which spudded in with machine to 223 feet where it set 12½-inch casing. Well is located on a seismograph high. On completion of Spaugh 1, the company plans to move 4 miles south and test another seismic high in the South Lance Creek area.

Sinclair-Wyoming Oil Company's two deep wells to untested sands in gas structures of west central Wyoming developed water in the Sundance and are drilling ahead to the Pennsylvanian series.

In the Wertz field, Carbon County, Sinclair Wyoming Oil Company's Wertz 10-A, SE NW 7-26n-89w, had Sundance at 4050 feet, and cores showed water saturation. Well is drilling at 4303 feet in the red beds. The company's Muskrat 2-C, NE SW SW 1-33n-92w, Muskrat field, Fremont County, is coring at 6512 feet after developing water in the Sundance at 5935-6188 feet.

Northern Wyoming

Two wells completed in the Byron-Garland district, Big Horn County, northern Wyoming, last week, while Stock Oil Company overcame another obstacle in efforts to bring its wild Garland gasser under control.

Ohio Oil Company's Orson Vail 1, C NW NE 23-56n-97w, Byron field, pumped 500 barrels initial from the Embar-Tensleep zone at 5009-5214 feet, and may change over to larger size pumping equipment for a second production test. The company's Irene Lindsay 1, C NW SE 25-56n-97w, is drilling at 4281 feet.

Stock Oil Company completed Allen 1-X, E NW SE 32-55n-97w, Garland, for 500 barrels in the first 24 hours from the Madison lime at 3900-4101 feet. The well is shut down and may be acidized after the company brings Allen 1 under control. The well originally started as a side well to drill to the Dakota series and pump water into Allen 1 in an attempt to bridge hole and kill flow in the gasser.

Last week the company succeeded in running drill stem to 1200 feet and past obstruction at 400 feet in Allen 1, NW SE 32-55n-97w, which has been flowing an estimated 60,000,000 cubic feet of gas daily from the Embar at 3815 feet. With drill stem to 1200 feet, operators believe that mud can be pumped in successfully to kill gas flow. Flow is bradenheaded off from the 12½-inch surface string to standpipes 300 feet from the well. Operations in Allen 1 are carried out through the 6-inch gate above escape manifold where it is welded to the surface string. Hole of Allen 1 bottoms at 3838 feet and has 1000 feet of old drill stem frozen to bottom.

Ohio Oil Company's Smith 2, W NW SE 35-55n-97w, is drilling at 1575 feet. This is an old Frontier producer, which was first deepened as side well to pump into Allen 1, and is now drilling ahead to complete in the Madison lime for black oil production.

Resolute Oil Company's State 1, C NW SW 16-5n-101w, Badger Basin field, Park County, northern Wyoming, is drilling at 7081 feet.

Place Oil Company (L. W. Davis et al of New York City) is planning a core drilling campaign in the La Barge area, Lincoln County, western Wyoming. The company is moving in

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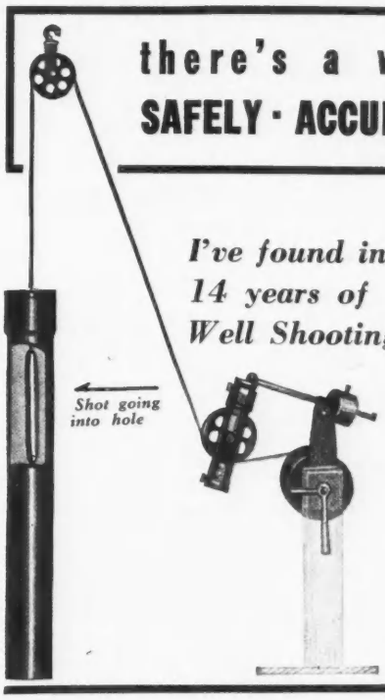

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machine in SE 9-26n-113w, and if core drilling operations yield satisfactory geological data, company plans to seismograph the area with view of drilling a deep test.

Northern Montana

Three of the five starts last week in the Cut Bank field, Glacier County, northern Montana, were on Blackfeet Indian lands, and come as result of the Interior Department's refusal to postpone drilling requirements on tribal leases in the western area of the field. The Cut Bank field has been faced with a serious marketing problem, and private operators in the field have been co-operating for the past several months to hold down the number of new wells drilled. One well completed this week.

First reports for the week include: Drumheller Reservation Syndicate's Tarrant 1, C SE SW 21-34n-6w, an outside location to the west; The Texas Company's Tribal 2-121, NE SE 36-33n-6w; and A. B. Cobb's Allotted 2-115, SE NE SE 31-33n-5w, all on Indian lands; and R. C. Tarrant's Getty 7, C SW NW SW 2-34n-6w, an inside location; and Nadeau Brothers Ewald 2, C SE NW 9-32n-5w, in the southern sector of the field.

Kevin-Sunburst

Without the benefit of acid, a 125-barrel flowing well was brought in this week in the Kevin-Sunburst field, Toole County, Montana, while two other wells were completed and five started.

Big West Oil Company's Dahlquist 3, SE NE NW 21-35n-3w, flowed 125 barrels initial from the Sunburst at 1795 feet. Coolidge & Coolidge Inc.'s Shaw 3, SE SE NE 35-36n-2w, completed for 6 barrels daily at 1533 feet.

Deloraine Oil Company's Government 4, NW SW NE 28-35n-1w, pumped 5 barrels initial from a stray sand in the shale at 1385 feet.

New wells starting are: Coolidge & Coolidge Inc.'s Derzer 1, C EL SW NW 11-35n-3w, rigging up; Nepstead & Vander Pas' Thompson 2, C SE SW 2-35n-3w, drilling at 990 feet; Agen & Goedertz Oil Company's State 3, NE SW NE 16-35n-3w, location; Agen & Krause 1, SE SE SE 9-35n-3w, location; and B. A. S. Arnow's Government 3, NE SE NW 21-35n-3w, rigging up cable tools.

MOUNTAIN STATES

Completions

MONTANA

Company, Well and Location	Init. Prod. Bbls.	Depth
GLACIER COUNTY (Cut Bank Field)—		
Texas Co., Miller 1, cnw ne 32-33n-5w	146	2982
British-American Oil Co., Tribal 11, lot 7, 10-34n-6w	95	2931
Consolidated Gas Co., Nadeau Allotted No. 2-114, cse sw 31-33-5w	60	3025
Texas Co., Ray Hardwick 1, csw ne 32-33n-5w	81	2982

WYOMING

ALBANY COUNTY (Quealy Dome Structure)—		
California Co., Wilson 2, sw 18-17n-76w	120	3543

*Failures; †Junked; ¶Million cu. ft. gas.

Wilmington Active

14 ACTIVE OPERATIONS ARE LISTED IN THE DISTRICT

WEEKLY STAFF REPORT

Los Angeles.—The Wilmington area in the Los Angeles Harbor District, 5 miles west of Long Beach, holds the center of interest in the Los Angeles Basin for the greatest quantity of new and semi-wildcat activity. Three wells are producing, one is an idle producer, four are drilling, two are rigging up, and eight are locations.

During the past week, Sovereign Oil Company's Advance Truck 1 was completed, pumping 150 barrels a day of 17 gravity oil, cutting 5 per cent. Bankline Oil Company's Dominguez Harbor Community 1 was bottomed at 4334 feet and plugged back to 3510 feet, and 9-inch water string was cemented at 3170 feet for a test of the upper, heavy oil zone. General Petroleum Corporation's Terminal 1, the deep test of the area, is being cored ahead in Modelo shale (middle Miocene) at 6573 feet. The basal conglomerate zone which underlies the Modelo shale and overlies the eroded basement complex is expected to be cored at any time.

In the recently discovered Adam area, 2 miles southeast of Santa Maria, R. R. Bush Oil Company's Hancock-Bush-Brown 1, was completed September 17, flowing 1600 barrels a day of 16.6 gravity oil cutting 30 percent. Flow is through 28/64-inch choke with tubing and casing pressures of 175 pounds and 200 pounds respectively. Present production is 2000 barrels a day of 16.6 gravity oil, cutting 2 percent. Depth is 4335 feet, plugged with cement to 4285 feet. The top of the Monterey series (middle Miocene) was cored at 3100 feet and top of the Franciscan Metamorphics (Jurassic) was cored at 4300 feet. This well extends to proved limits of production at least one half mile to the south. Its completion with the highest initial production in the field came as a surprise, due to the fact that it correlates 770 feet low at the top of the Monterey, and 1315 feet low at the top of the Franciscan, indicating a thickening between these two points of 545 feet.

Union Oil Company's Mahoney 1 was completed September 13, flowing 659 barrels a day of 15.9 gravity oil, cutting 1.2 percent, and 115,000 cubic feet of gas. Flow was through 1-inch choke with tubing and casing pressures of 50 pounds and 300 pounds respectively. Present production is 615 barrels a day of 16.4 gravity oil cutting 0.5 percent and 103,000 cubic feet of gas, flowing through 2-inch choke with tubing and casing pressures of 50 pounds and 630 pounds, respectively. Depth is 3004 feet with top of the Monterey cored at 2330 feet and top of the Franciscan cored at 2985 feet. The 8⅝-inch combination casing, including 636 feet perforated, was landed at 2995 feet and cemented through perforations at 2355 feet. This well is located one-half mile north of Hancock-Bush-Brown 1, and about 2000 feet west of the discovery well, Union Oil Company's Adam 1. Production in this area is from sand streaks and fractured shales of the Monterey series which rests unconformably upon Franciscan metamorphics.

Shell Oil Company's K.C.L. A-6, the second project in the new Ten Section oil field, 15 miles west of Bakersfield, is being cored ahead at 8341 feet in oil sand with thin streaks of shale. The top of the oil sand was cored at 7763 feet, and of this present penetration of 578 feet of zone, an aggregate of 430 feet is oil sand. This well correlates 49 feet higher than the discovery well, Shell Oil Company's K.C.L. 1, located ¼-mile to the north-

CALIFORNIA

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
MONTEBELLO—		
Standard, Baldwin 88	200	3000
Wilshire Oil Co., Montebello 1	150	6938
TORRANCE—		
Jas. S. Hull, No. 1	100	4012
FRUITVALE—		
Exeter Oil Co., Henry 1	150	4165
Trico Oil & Gas Co., Knowles 1	60	3725
Mohawk Pet. Co., K.C.L. 23-3	175	3174
Western Gulf, Red Ribbon 5	270	3459
West 2	620	3937
White & Haar, Sheel 1	30	4710
EDISON—		
R. E. Corbett, Rose 2	75	2176
KERN FRONT—		
General Pet. Corp., Westmore 10	110	2025
Republic Pet. Co., Strassburger 11	275	2050
McKITTRICK—		
Welport Oil Co., No. 15	80	1214
MIDWAY SUNSET—		
C. C. M. Oil Co., No. 18	470	2153
General Pet. Corp., No. 32-5	175	3180
Otis Hoyt, Maricopa 3	250	1847
Quality Oil Co., Bull 3	600	2150
Standard, No. M-26-18	150	2638
MOUNT POSO—		
R. S. Lytle, Dorsey 4	200	1689
ROUND MOUNTAIN—		
Honolulu Oil Corp., No. 18-37	230	2275
ADAM—		
R. R. Bush Oil Co., Hancock 1	2000	4335
Union, Mahoney 1	660	3004
VENTURA AVENUE—		
Associated Oil Co., Lloyd 136	110	8691

*Failures; †Junked; ¶Million cu. ft. gas.

east. K.C.L. 1 was completed with only 76 feet of zone open to the well from 7812-7888 feet, and K.C.L. A-6 is being used to prospect ahead. The oil contained in the sand is becoming darker with depth.

DeAugustine-Abrams-Daly Oil Company's Barnett 1, in the East Coyote field 40 miles east of Los Angeles, was recompleted September 13, pumping at the rate of 275 barrels a day of oil. Present production is 220 barrels a day of 22.5 gravity clean oil. The well started flowing August 4, with only 5 feet of hole open below the shoe of the 8⅝-inch casing for a shut-off test. The 2½-inch tubing was hung at 2595 feet and production built up from 327 barrels a day of 22.8 gravity oil cutting 0.8 percent to 380 barrels a day of 21.6 gravity oil, cutting 0.5 percent. The well was recently killed and cleaned out to bottom at 2811 feet, 95 feet of 6⅝-inch liner, including 76 feet perforated, was landed on bottom, and the well recompleted. The 8⅝-inch water string was cemented at 2735 feet. This is considered the discovery well of the easterly extension of East Coyote oil field and has precipitated the starting of three additional projects.

Continental Oil Company's Carlton Community 2, located 500 feet east of DeAugustine-Abrams-Daly Barnett 1, was drilled and cored in shale with streaks of oil sand to 2751 feet. The bottom 11 feet looked wet, however, and the hole was plugged back to 2740 feet. The 6⅝-inch water shut-off at 2680 feet was approved by the Division of Oil & Gas, and a liner is being run.

Hancock Oil Company's Page 1, north of Carlton Community 2, is being cored in shale with streaks of oil sand at 2760 feet. Each of four attempted formation tests of the interval 2560-2732 feet failed to give conclusive results.

In the Montebello oil field, 12 miles east of Los Angeles, Republic Petroleum Company's Republic-Fee 1, Section 6-2s-11w, tested the upper portion of the Nutt zone with a formation tester and found it to be wet. The well is being cored ahead at 5713 feet for the lower Nutt zone. The top of the conglomerate was cored at 5433 feet, and top of the Nutt zone was cored at 5685 feet.

Richfield Oil Company's Ciocco 1, in Section 5-2s-11w, East Montebello extension, was plugged back to 5970 feet, and 8⅝-inch water string is cemented at the top of the Nutt zone at 5400 feet. The 2½-inch tubing was hung at 5407 feet for a swab test of the open hole. With the fluid level at 1500 feet the well was making water with a trace of oil.

Signal Oil & Gas Company's Lapworth 1, at the extreme northeast end of the Montebello field, was drilled to 4959 feet without encouraging showings below 3160 feet. The well was plugged back to 3160 feet and preparations are being made to pump the shallow zone. The 10¾-inch water string is cemented at 3088 feet.

In the Puente Hills, 45 miles east of Los Angeles, Chino Petroleum Corporation's Abacherle 2, wildcat well in Section 12-3s-8w, was cored in shale with streaks of oil sand from 2170-2235 feet. Preparations are being made to run a liner. This is the zone from which production is being obtained in Western Gulf Oil Company's Abacherle 1, located about 900 feet to the southeast. The 8⅝-inch water string is cemented at the top of the upper showings at 1405 feet, and since it is probable that no water sands exist below that point, both zones will be left open to the well during the test.

Associated Oil Company's Williamson 4, Section 2-26s-20e, was cored to 1785 feet and tested wet with a formation tester. The bottom of the hole was plugged with 25 sacks of cement, and the well will be put on production in the upper zone. The 11¾-inch casing was cemented at 1024 feet.

PERMITS EXTENDED

Washington. — Automatic extension until December 31, 1937, of all oil and gas prospecting permits issued under the act of February 25, 1920, where the permittees have submitted both stipulations and a unit agreement pursuant to departmental regulations, was announced September 22 by Secretary of the Interior Harold L. Ickes.

It was ordered, however, that all permits will be canceled at the end of 1937 unless discovery of oil or gas has been made on the permit area, or the permit lands are included in an approved unit plan, or the permit has been converted to a lease under the act of August 21, 1935.

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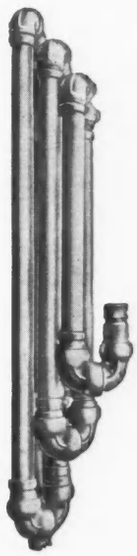

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WEEKLY STAFF REPORT

Mt. Pleasant, Mich.—Six wildcat tests were abandoned as failures this week in Michigan. Two of the failures in particular struck hard blows at the future of development.

Jetter Oil Company logged Dundee at 3113 feet in Middleton 1, 12-9n-6w, Montcalm County, and quit at 3165 feet with water after the test failed to show. It was located a half-mile south of the Long 1, which was completed early in the year as a 25-barrel producer in the Dundee. Attempts to establish a pool since have failed, including offsets.

After showing a 30-to 45-foot structure rise on upper beds, H. E. Bell's Arthur 1, 29-6n-1w, Clinton County, logged Dundee at 2843 feet and had water 60 feet in. It was drilled to 2995 feet, however, before abandonment. The test showed oil and gas in the Traverse and a light gas show in the Dundee.

The other failures were equally disappointing, but were in districts which had been less heavily played.

After standing 6 days shut in, Goll, Graves & Mechling's Crigano 1, 36-17n-2w, 4 miles south of the Beaverton pool in Gladwin County, swabbed 73 barrels from 3890 feet, Dundee lime, and now will be acidized. This was the most important development of the week.

MICHIGAN

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CLINTON COUNTY—		
H. E. Bell's Arthur 1, 29-6n-1w, nw sw nw	*	2995
GENESEE COUNTY—		
C. E. Bliss' Crawford 1, 27-9n-8e, ne ne ne	*	....
GLADWIN COUNTY—		
M. F. Whitehill's Spicer 1, 2-17n-2w, nw se nw	20–4	3865
GRATIOT COUNTY—		
McPherson Co.'s State Bank 1, 11-9n-1w ne sw se	*	2950
INGHAM COUNTY—		
Petroleum Exploration Co.'s Burgess 1, 12-3n-1w, sw sw se	*	860
ISABELLA COUNTY—		
Roach-Lyon Corp.'s Varney 2, 34-15n-3w se se sw	75	3619
MECOSTA COUNTY—		
Daily Crude Oil Co.'s Hoffman 1, 9-16n-7w, nw sw se	*	3816
Taggart Brother's Waters 1, 28-16n-8w, nw sw se	*	1717
Schuberg 23, 4-11n-9w, c nw ne	¶15	1410
Stewart-Atha, Inc.'s Amsden 3, 31-13n-7w, c nw se	¶25	1313
MIDLAND COUNTY—		
Mid-West Dev.'s McCormick 1, 20-15n-2w, ne ne sw	30	3672
Brehm-Hollman's Cade-Stemple 1, 19-15n-2w, se ne nw	*	....
Pure Oil Co.'s Bond C-4, 1-13n-2w, s½ se sw	*	3457
MONTCALM COUNTY—		
Ide & Glavin's Hanson 1, 9-12n-7w, c nw sw	¶4½	1298
Wolverine Nat. Gas Co.'s Richardson 2, 3-12n-7w, c nw se	*	494
Prudential Oil Co.'s Schippey 1, 6-12n-7w, c se ne	¶25	1310
Jetter Oil Co.'s Middleton 1, 12-9n-6w, nw ne ne	*	3165
Max Pray's Strait 1, 3-10n-5w, sw nw nw	40	3208
Rex Oil Co.'s Fisher 1, 36-11n-5w, sw se se	120	3190
TUSCOLA COUNTY—		
Co-Op Oil Co.'s Forsyth 1, 36-10n-7e, se sw se	*	2853

*Failures; †Junked; ¶Million cu. ft. gas.

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EASTERN FIELDS

WEEKLY STAFF REPORT

Completions

OHIO

Company, Well and Location	Init. Prod. Bbls.	Depth
ATHENS COUNTY—		
Ohio FG Co., J. M. Chappell 1	¶	1642
Carpenter & Glazier, Smith 1	4	333
Bean 12	1	163
Bean 13	*	221
Leeper & Co., Gosvernor 12	*	1065
A. D. Townsend, Bobo 1	¶	1622
LORAIN COUNTY—		
Edson & Son, Chester 1	*	2349
Ohio FG Co., Hunt 1	*	2500
MEIGS COUNTY—		
Ohio FG Co., Correll 1	¶	2108
Martin 1	¶	1948
Marshall & Reed, Romine 3	¶	954
Meigs Home, Bengel 7	*	1750
Racine Gas Co., Bartells 2	*	601
GUERNSEY COUNTY—		
D. T. Orndorff, Stewart 1	*	....
MONROE COUNTY—		
Pure Oil Co., Unger 1	¶	1345
WASHINGTON COUNTY—		
Swingle & Co., Palmer 31	3	580
Tenning Bros., Hendricks 1	45	....
KNOX COUNTY—		
Ohio FG Co., Cornell 1	¶	845
Melick 1	¶	3373

KENTUCKY

OHIO COUNTY—		
Cumberland Pet. Co., Richards 32	25	....
Joseph B. Mayer, Medcalf 16	20	....
Kentucky Nat. Gas Co., Power 12	25	....
Mecca Oil Co., Smith 12	40	....

WEST VIRGINIA

BOONE COUNTY—		
United FG Co., Mohler Lumber Co. 4619	¶	4226
Horse Creek 4573	¶	4150
CABELL COUNTY—		
National Gas Corp., Whitaker 3	¶	2131
ROANE COUNTY—		
L. C. Young & Co., G. N. Gandee 1	¶	1464

*Failures; †Junked; ¶Million cu. ft. gas.

THE OIL WEEKLY REPORT ON IMPORTANT *Wildcat Tests*

ALABAMA

HOUSTON COUNTY—Rice O&G Co.'s Oakley Est. 2, se nw sw 9-3n-29e, elev 191 ft, installing heavier rig, td 4002 ft.

MOBILE COUNTY—J. C. Prine's King 1, 4-1n-4w, pb to 2600 ft, sd old td 3186 ft. Grand Bayou O&G Co.'s J. A. Stafford 1, sw sw 24-7s-3w, lcn.

ARKANSAS

BRADLEY COUNTY—Phillips Pet. Co.'s Byrd 1, 28-16-12, rur.

CALHOUN COUNTY—I. P. B. Oil Corp.'s Henisberger 1, sw se 9-11-13, elev 207 ft, woc 110 ft.

COLUMBIA COUNTY—Burford & Co.'s Kendrick 1, nw se 8-19s-18w, coring 3325 ft. J. C. Buckbee, Tr.'s Cumbie 1, 17-17-18, sd 2745 ft.

CLARK COUNTY—J. G. Wooten's Sparkman 1, 1-11-20, spd & sd.

CLEVELAND COUNTY—Diffie et al's L. C. Ross 1, sw ne 1-11-11, woc 100 ft. R. L. Saxon's L. C. Tipton 1, sw ne 13-11-12, elev 207.4 ft, rur.

DALLAS COUNTY—A. F. Tarver's Wilbon 1, ne se 21-9-13, elev 204 ft, dr 3052 ft. Walter Lown's Atkinson 1, 7-10-13, woc surf csg.

HEMPSTEAD COUNTY—Buffalo Oil Co.'s A. J. Lafferty 2, se nw 17-14-24, woc 4½ in csg set at 2443 ft, td 2470 ft. H. D. Easton et al's Conway-Tiller 2, sw sw 34-12-27, elev 251 ft, base chalk 740 ft, top massive anhydrite 2032 ft, (corrected), base massive anhydrite 2132 ft, coring 2780 ft, lime with strks shale & sand (Glen Rose); Imperial O&G Products Co.'s Foster 1, nw sw 35-12-26, top massive anhydrite 2012 ft, dr 2015 ft, anhydrite. Stewart Oil Co.'s Fee 1, se ne se 31-12-23, woc surf csg, 70 ft. Louis Hay's State 2, swc 18-14-25, dk & mir.

LITTLE RIVER COUNTY—M. E. Sanderson's Penning 1, ne ne sw 6-13-30, woc 168 ft. Joe Strahan's Dierks Lbr. Co. 1, 21-12-28, mim.

LONOKE COUNTY—J. F. Russell's Gunter 1, se se 17-5-10, dk. Fred Silver's Jos. Chambers 1, sw ne nw elev 229.2 ft, woc 1624 ft.

MILLER COUNTY—Erwin & Leach's Red River Farms 1, 2-17-26, woc 10-in csg 445 ft. Joiner et al's Montana Realty Co. 1, ne nw nw 3-17-28, top red beds 3505 ft, did not test so 4685 ft, dr 5010 ft anhydrite. McClanahan et al's Miller Lbr. Co. 1, sw sw 2-18-28, coring 5888 ft.

NEVADA COUNTY—Benedum & Trees Oil Co.'s Groves 1, sw sw 10-14-20, tested est 20-25 mil ft gas 1225-85 ft, dr 1490 ft. Steel & Warmack's Wm. Haynie 1, se se nw 6-14-21, mim.

OUACHITA COUNTY—J. F. Ferris' G. Dean 1, owdd, td 2997 ft. Phillips Pet. Co.'s Arnold 1, ne sw 27-15-15, elev 207 ft, top rock salt 5630 ft, pb to 5175 ft, completed 90 bbls oil, 2½ to 3 mil ft gas, old td 5708 ft.

POPE COUNTY—Ark. La. Gas Co.'s L. C. Smith 1, sw sw se 10-8n-21w, spd woc surf csg.

CALIFORNIA

FRESNO COUNTY

CANTUA CREEK—Western Gulf's S.P.L. Co. 3, 3-17-15, td 8531 ft, last 2 ft gray sand, above was shale streaks of oil sand, to test.

KERN COUNTY

LERDO—Arkelo Pet. Co.'s No. 1, 23-28-26, spud 9/19.

MOUNTAIN VIEW—Associated's Di Giorgio 2, 3-31-29, dr hard sandy shale 4035 ft. Mohawk Pet. Co.'s Earl Fruit 2, 10-31-29, dr sandy shale 4000 ft; Earl Fruit 3, grading; Earl Fruit 4, lcn.

RIO BRAVO—Associated's K.C.L. 1, 30-29-25, dr hard sand and shale 4376 ft.

LOST HILLS—Associated's Taylor 1, 1-26-20, dr gray sand 4180 ft. Standard's United 1, 2-26-20, td 6887 ft, plug 5537 ft, perforated to test. Associated's Williamson 4, 2-26-20, td 1785 ft, tested wet, to recement; Lincoln Pet. Co.'s No. 1, 12-26-20, lcn. Texas Co.'s Theta 1, 11-26-20, lcn.

GRAPEVINE—Associated's Tejon 1, 17-11-19, td 2948 ft, r to bottom. Ohio Oil Co.'s Title Ins. & Trust 1, 21-11-19, spud 9/15. 101 Oil Co.'s Tejon 1, 5-10-19, rur. Reserve Oil & Gas Co.'s Tejon 33-2, 33-11-19, td 4505 ft, was swabbing water and oil, lost swab, fsh.

MARICOPA—E. A. Bender's Robinson 1, 14-10-23, dr brown shale 1110 ft.

DEVIL'S DEN—Den Pet. Co.'s Bates 1, 20-25-19, dr blue gray clay 1050 ft.

JASMINE—Doyle Pet. Corp.'s Quinn 1, 15-25-27, td 2892 ft, pumping 95 percent water, rest oil.

ARVIN—General Pet. Corp.'s Arvin 1, 26-31-29, dr sand and shale 6401 ft.

NO. BELRIDGE—Rio Grande Oil Co.'s Layman 1, td 1650 ft, plug 1400 ft, wocs. Shell's Voight 1, 5-28-20, dr gray sand 2970 ft.

TEN SECTION—Standard's K. C. 11-1, 19-29-26, dr clay and gravel 1100 ft. Superior Oil Co.'s K. C. L. 8, 11-30-26, lcn.

AVILA—Farrell Pet. Co.'s No. 1, 18-31-12, td 1837 ft, co.

HUASNA VALLEY—Union's Porter 1, 32-32-15, dr shale 665 ft.

PANORAMA HILLS—United Foreign Oil Co.'s Panorama 1, 2-32-21, dr gray shale 1711 ft.

SANTA BARBARA COUNTY

COAL OIL POINT—Bankline Oil Co.'s No. 2, permit 191, td 4185 ft, plug on bottom. O. C. Field's Santa Rita 1, 11-7-33, sd 2064 ft.

BETTERAVIA—E. H. Morre's Union Sugar A-1, 25-10-35, dr hard gray shale 6414 ft.

CASMALIA—Todos Santos Oil Co.'s No. 1, 29-9-34, dr shale 1610 ft.

LOMPOC—Top Row Oil Co.'s Spanne 1, dr hard shale 970 ft.

VENTURA COUNTY

PIRU—Associated's Wiley Canyon 1, 6-3-11, bldg road. Torry Ventura Pet. Co.'s Torry 1, 32-4-18, td 4093 ft, to set casing.

BARDSDALE—El Rancho Oil Co.'s Elkins 1, 9-3-19, td 5107 ft, to run liner. Layning & Jacobs' No. 1, td 1275 ft, rep machinery.

SO. MOUNTAIN—Honolulu Oil Corp.'s Hobson 1, 23-3-21, dr shale 3985 ft.

BIG SESPE—Supreme Oil Co.'s No. 1, sd 1700 ft.

SATICOY—Texas Co.'s Lloyd-Butler 1, td 3450 ft, redr and sd junk.

OXNARD—Vaca Oil Explor. Co.'s Calif. Lands 1, 6-1-21, td 2830 ft, rigging bottom hole heater to thin oil.

VENTURA—Ventura Explor. Co.'s Sexton 1, 30-3-22, td 9525 ft, wocs 4¾ at 9500 ft.

SOUTHERN CALIFORNIA

NEWHALL—Barnsdall's Rancho S.F. 1, 26-4-17, dr shale thin stks oil sand 2890 ft. Holbrook Pet. Co.'s Newhall L&F Co. 1, 28-4-16, dr sandy shale 3310 ft. Yant Pet. Corp.'s Yant 5, 1-3-16, dr shale 2810 ft.

COMMANCHE POINT—Tejon Ridge Oil Co.'s Tejon 1, 23-32-29, sd 2519 ft.

SO. BELRIDGE—Temblor Range Oil Co.'s No. 1, 24-28-20, sd 933 ft.

SAN EMIDIO—Texas Co.'s K. C. L. C-11-49, 11-11-22, dr shale 9390 ft.

MISCELLANEOUS

ALAMEDA COUNTY—Seaboard Oil Corp.'s Johnson 1, 13-3-3, dr sandy shale 3790 ft.

HUMBOLDT COUNTY—Texas Co.'s Eureka 2, 22-3-1, td 4428 ft, r.

KINGS COUNTY—Associated's Avenal 1, 35-23-17, dr hard brown sandstone 2924 ft. J. P. Herndall & Associates' Spreckles 1, 16-24-18, td 4201 ft, plug 1985 ft, bailing. Milheim Oil Corp.'s Resources 1, 20-22-22, td 5810 ft, fsh.

SAN BENITO COUNTY—Associated's Murphy Ranch 1, 5-12-4, dr sandy shale 3978 ft.

SOLANO COUNTY—Amerada Pet. Corp.'s Hoppe 1, 22-4-2, dr hard gray massive shale 6090 ft. Standard's Neils Anderson 1, 27-4-2, dr shale 4110 ft.

TEHAMA COUNTY—Northern Counties Pet. Co.'s Ewers-Mooney 1, 25-24-3, sd 8260 ft.

TULARE COUNTY—J. W. Alford's Williams 1, 28-16-23, rur. Trico Oil & Gas Co.'s Calif-Western 1, 2-23-23, td 1800 ft, plug 1450 ft, redr to 1800 ft, testing; Callison 1, 27-21-25, rig.

MONTEREY COUNTY—Shell's Branch 1, sd 8994 ft; Branch 2, dr shale 1161 ft.

SAN LUIS OBISPO COUNTY

CARRIZO PLAINS—Barnsdall's Wreden 1, 24-28-17, sd 5083 ft.

ARROYO GRANDE—Birch-Royer Oil Co.'s Patchett 1, 33-31-13, dr hard brown shale 2260 ft. Blue Ridge Oil Co.'s Carpenter 1, 5-32-13, lcn. A. T. Jergins Trust's Roderiguez 1, 5-32-13, sd 3654 ft; Roderiguez 2, foundation. Pismo Pet. Co.'s Scott 2, 5-32-13, rig. R. W. McBurney's No. 1, 23-32-22, rig.

CHOLAME—Cholame Synd.'s Jack 2, 10-25-15, td 3648 ft, plug 3103 ft, co.

EDNA—Crail Bros.' Vedder 1, 8-32-13, to be abn at 3792 ft.

ARTESIA—M. T. Bernstein's Millard 1, 25-3-12, dr shale 5910 ft.

GARDENA—Crude Oil Dr. Co.'s No. 1, 31-3-13, dr shale dips 20 degrees 4360 ft.

TORRANCE—Oliver McDowell's No. 1, 35-3-14, dr shale 7061 ft.

PALOS VERDES—Pamaco Royalty Co.'s Burkhard 1, 2-5-14, rigged and idle.

ASCOT SPEEDWAY—Republic Pet. Co.'s Jordan 1, 24-1-13, rig.

ROSECRANS—Republic Pet. Co.'s Trust 1, 18-3-13, td 6141 ft, plug 5925 ft, killed, pulled tubing, to perforate higher up.

LAWNDALE—Signal Finance Corp.'s Woods 1, 10-3-14, dr conglomerate 8191 ft.

GARDENA—Standard's Bodger 1, 22-3-14, to skid rig from Sovereign's Long 1. West American Oil Co.'s Dominguez 1, 5-4-13, dr shale and sand 4831 ft.

FOX HILLS—Superior Oil Co.'s Inglewood Ext. 1, 25-2-15, rur. Universal Consol. Oil Co.'s Carrell 1, grading lcn.

SANTA FE SPRINGS—Vanda Pet. Corp.'s Loftus L. Co. 1, 4-3-11, dr shale streaks sand 7840 ft.

ORANGE COUNTY—Calif. Eastern Oil Co.'s Verde 1, 31-3-9, td 4750 ft, fsh. Mesa Oil Co.'s Mesa 1, 29-6-10, sd 2121 ft. Shell's Anaheim Sugar 3-1, 7-6-10, sd 3518 ft. West Coast Ref. Co.'s Yorba 1, 25-3-9, dr shale 380 ft.

SAN BERNARDINO COUNTY—Chino Pet. Corp.'s Abacherle 2, 12-3-8, td 2235 ft, top oil sand 2170 ft to run liner. Equitable Pet. Explor Co.'s No. 1, 11-10-5, dr hard sand 2764 ft. Tehama Pet. Co.'s Kramer-Backs 2, 33-2-8, dr hard shale 641 ft; Pellisier 1, 4-3-8, dr hard shale 1244 ft.

COLORADO

BOULDER COUNTY—Boulder Producing & Drilling Co.'s Maxwell 2, sw sw ne 24-1n-71w, dr 1704 ft in Pierre shale.

JACKSON COUNTY—Colorado Oil Refining Co.'s North Park Coal 1, cnw nw 18-9n-78w, sd 2700 ft for pipe.

LA PLATA COUNTY—Detroit Oil & Gas Co.'s 1, sw sw 8-35n-12w, owdd from 3125 ft and co.

MOFFAT COUNTY—Continental Oil Co.'s Henderson 1, sw sw sw 16-3n-91w, setting pipe to test oil showing top of Sundance at 2525 ft. Oil saturation 2553-2575 ft.

PARK COUNTY—South Park Oil Co.'s

ABBREVIATIONS

The following abbreviations, signs, etc., are used in completions and wildcat reports in THE OIL WEEKLY.

*—*dry hole abandoned well.*	owdd—*old well drilling deeper.*
‡—*salt water (completions).*	owpb—*old well plugging back.*
†—*junked and abandoned.*	pb—*plugged back or plugging back.*
¶—*million feet of gas.*	r—*reaming.*
abd—*abandoned.*	rog—*rig on the ground.*
bbls—*barrels.*	rur—*rigging up rotary tools.*
br—*building rig.*	rust—*rigging up standard tools.*
b.s.—*basic sediment.*	sd—*shut down.*
csg—*casing.*	sdtr—*sidetracking.*
co—*cleaning out.*	sg—*show gas.*
dd—*drilling deeper.*	si—*shut in.*
dk—*derrick.*	so—*show oil.*
dr—*drilling.*	so & g—*show oil and gas.*
fsg.—*fishing.*	spd—*spudding.*
ft—*feet.*	sr—*straight reaming.*
hfw—*hole full of water.*	sw—*salt water.*
in—*inches.*	td—*total depth.*
lcn—*location.*	ur—*underreaming.*
m—*milling.*	wih—*water in the hole.*
mim—*moving in materials.*	wo—*workover.*
mit—*moving in tools.*	wocs—*waiting on cement to set.*
mot—*milling on tools.*	wosr—*waiting on standard rig.*
n, s, e, w—*north, south, east, west.*	
oih—*oil in hole.*	

State 1, se se sw 16-11s-75e, dr 4950 ft and carrying 4¾ in csg at 705 ft. Company's LeBert 1, ne ne nw 31-11s-75w, sd 705 ft. Company's Lemarr 1, ne ne se 34-11s-75w, co after recovering lost csg.

WASHINGTON CONUTY—Indian Territory Oil Co., Foster Mining Corporation, and Carter Oil Co.'s Vorce 1, cne ne 28-1s-49w, fsg for junk with td 5557 ft.

YUMA COUNTY—Indian Territory Oil Co.'s Strangways 1, cnw sw 21-2s-43e, dr 5588 ft.

FLORIDA

HILLSBOROUGH COUNTY—Southern Pet. Co.'s Mizell & Williams 2, se ne 4-32s-21e, elev 120 ft, sd 965 ft.

LAKE COUNTY—Oil Dev. Co. of Fla.'s Gulf Expl. Co. 2, se se 17-24s-25e, elev 120 ft, sd 5112 ft.

NASSAU COUNTY—St. Mary's River Oil Corp.'s Bank of Hilliard 1, elev 110 ft nw se 19-4n-24e, dr (with ct) 700 ft.

POLK COUNTY—Edw. A. Hill, Tr.'s Polk Co. Lbr. Co. 1, nw nw ne 32-25s-25e, elev 90 ft. dk.

KANSAS

BARBER COUNTY—Sinclair Prairie's Gentry 1, ne ne ne 1-33s-15w, cor 4596 ft.

BARTON COUNTY—Brouk et al's Keil 1, se se ne 11-16s-15w, testing. Rose & Lantz' Redetzke 1, ne nw nw 1-16s-11w, dr 3237 ft. Yernell & Carlson's Rath 1, ne ne ne 35-18s-12w, dr 1850 ft. C. L. Price' Deutsch 1, nw nw ne 16-16s-13w, sd 2125 ft. F. E. Bailey et al's Hammeke 1, nw ne sw 12-18s-12w, sd 315 ft.

BUTLER COUNTY—Dalton et al's Miley 1, csw ne 17-27s-5e, sd 350 ft.

CHASE COUNTY—Propp et al's Fromm 1, se se se 29-18s-9e, dr 2010 ft.

CLARK COUNTY — Olson & Watchorn's Morrison 1, cse sw 17-32s-21w, td 5459 ft, sg.

DECATUR COUNTY—Winkler & Koch's Vessey 1, cnw se 26-3s-26w, rur.

EDWARDS COUNTY—Stanolind & Elwell's Donovan 1, cse se 14-25s-18w, to skid rig.

ELLSWORTH COUNTY—Empire O. & Ref. Co.'s Kunkel 1, se se se 16-15s-8w, dr 2695 ft.

ELLIS COUNTY — Jones & Shelbourne's Gunther 1, se se sw 9-11s-19w, sd 3577 ft. Bradley Oil et al's Penny Wann 1, se se se 13-15s-20w, woc 3631 ft. Empire's Samuelson 1, ne ne sw 31-11s-16w, co 3290 ft. Bridgport Mach.'s Ubert 1, ne ne nw 12-13s-18w, dr 3587 ft. Trigg et al's Armbrister 1, se se sw 6-11s-19w, dr 2975 ft. Lario O&G Co.'s Cress 1, ne ne ne 13-11s-17w, sd 346 ft. Lario's Marshall 1, nw se ne 36-11s-18w, dr 1260 ft. Champlin et al's Hadley 1, se sw ne 30-11s-17w, rust. Frank Hamilton et al's Sack 1, nw nw se 26-13s-19w, ru. Ted Kerr et al's Koblitz 1, se sw nw 23-12s-18w, dr 1130 ft. Wolf Creek Oil et al's Polifka 1, sw sw ne 24-13s-18w, dr 2895 ft. Glick & McMorrow's Staah 1, sw sw se 6-13s-17w, dr 1531 ft. Simar Oil Co.'s Leiker 1, nw nw se 12-15s-18w, set 8-in csg 2630 ft, sd. Taylor et al's Emery 1, ne ne ne 23-14s-18w, dr 310 ft. Winkler & Koch's Jensen 1, sw sw ne 3-13s-18w, rig.

GRAHAM COUNTY—Nook & Young's Hills 1, nw se se 19-10s-21w, dr 1573 ft. Sam Murphy & Alcorn's Wamoff 1, cnw nw 27-10s-22w, rr.

KINGMAN COUNTY — McBride's Wooldridge 1-A, sw ne se 16-27s-4w, fsg 3315 ft.

LINCOLN COUNTY — Graham et al's Smiley 1, ne nw nw 26-10s-9w, rur.

LYON COUNTY—Becker Bros.' Rossillion 1, se sw ne 19-21s-11e, abd 2300 ft.

MARION COUNTY—Empire's Schmidt 1, nw nw se 31-20s-2e, dr 3181 ft.

McPHERSON COUNTY—Hawkins et al's Ritikofer 1, ne ne se 2-20s-2w, dr 3257 ft.

NESS COUNTY—Newton Dev. Co.'s Tenny 1, nw nw se 19-18s-25w, sd 1200 ft. Sayre Oil Co.'s Ryersee 1, cne se 34-18s-21w, dr 2920 ft.

PRATT COUNTY—H. V. Elwell et al's Fay 1, nw nw se 15-27s-14w, dr 2650 ft. I.T.I.O and Olson's Bolt 1, cnw ne 5-29s-11w, dr 3832 ft.

RENO COUNTY—Miller et al's Detter 1, ne se nw 28-22s-7w, sd 2849 ft. Pryor & Lockhart et al's Kerr 1, cnw 22-23s-8w, ur 8-in csg 3138 ft. Foraker et al's Hiett 1, se sw ne 34-24s-4w, sd. Continental's Snook 1, ne nw se 10-22s-8w, abd 3728 ft. Graham et al's Miller 1, ne ne se 36-25s-10w, cor 4362 ft. Clyde Pulse et al's Payne 1, sw nw ne 4-22s-7w, mim. L. R. Page et al's Mueller 1, cs½ sw ne 25-24s-5w, sg 3372 ft. H. F. Thomas et al's Greenwood 1, ne ne ne 6-23s-9w, td 3936 ft, D&A. Fred Rust et al's Schmucker 1, se se sw 29-22s-8w, dr 2915 ft. Fred Phillips et al's Ray 1, sw sw sw 7-23s-8w, dr 3095 ft.

RICE COUNTY—Saco et al's Haxton Est. 1, nw nw ne 30-19s-8w, abd 3474 ft. Allison & Fitzwilliams et al's Foby 1, nw sw nw 17-19s-7w, dr 1380 ft. Jon Stark et al's Doran 1, ne ne ne 29-20s-8w, dr 2551 ft. Buckley's Bailey 1, sw sw nw 19-20s-6w, rig. Shell's Maughlin 1, ne nw se 11-20s-8w, sd 3294 ft.

ROOKS COUNTY—Lester & Dean's Burtt 1, se se ne 29-10s-2w, dr 1010 ft. L. C. D. Drlg. Co.'s Westhusin 1, cne se 11-19s-17w, dr 2472 ft. Hartman & Blair's Hall 1, nw nw nw 25-10s-17w, abd 3750 ft. J. A. Shoemake's Stebbins 1, ne ne sw 26-7s-17w, 1800 ft oih.

RUSH COUNTY—Skeeles et al's Grumbein 1, sw sw ne 7-16s-20w, cel. Ralph Wixton et al's Gorham Est. 1, nw nw sw 35-15s-16w, dr 1635 ft. C. L. Sheedy et al's Bison 1, sw sw sw 35-16s-17w, dr 515 ft.

RUSSELL COUNTY—Hartman & Blair's Johnson 1, nw nw nw 11-13s-15w, woc. Coralena Oil Co.'s L. A. Sellens 1, nw nw nw 17-15s-13w, ur 8-in csg 2800 ft. Armer et al's Maier 1, ne ne nw 20-15s-14w, fsg 3212 ft. Equity Gas Co.'s Harbauk 1, nw ne se 19-13s-12w, ru. El Dorado Ref. Co.'s Scott 1, nw nw ne 17-13s-13w, sd 835 ft. Braden & McClure's Herbel 1, ne ne nw 35-14s-14w, 2700 ft oih. Winkler & Koch's McAllister 1, ne ne se 9-12s-13w, dr 650 ft. Philhan Oil Co.'s Gerstner 1, sw sw se 24-14s-17w, acidized.

SALINE COUNTY—Ryan Consolidated and Archer's Norton 1, ne ne ne 30-14s-2w, dr 3350 ft. James Brouk et al's Othelander 1, ne nw se 10-16s-13w, skidding rig.

SEDGWICK COUNTY—Wakefield et al's Howard 1, se se ne 25-25s-2e, abd 3300 ft. Lauck's McLean 1, csw se 1-27s-1w, dr 4103 ft. R. J. Wallace et al's Sheer 1, sw sw sw 22-27s-3w, dr 3075 ft.

SMITH COUNTY—Helmerich & Payne et al's Meyer 1, ne ne sw 10-5s-11w, spd.

STAFFORD COUNTY—I. T. I. O. Co.'s Mellies 1, cn½ n½ ne 6-22s-11w, set 8-in csg 2702 ft, co. Skelly's Kipp 1, se se ne 27-25s-14w, dr 3315 ft. C. E. Skiles et al's Leidigh 1, nw nw sw 21-22s-11w, spd.

SUMNER COUNTY—Matthews & Derrington's Berry 1, nw nw se 14-25s-1e, sd 3780 ft. Texas Co.'s Reed 1, ne se se 11-31s-1w, dr 4027 ft. Pryor & Lockhart's McCowen 1, ne ne sw 18-32s-1w, dr 4005 ft. Orcott & Stewart's Newton 1, se se se 21-20s-2e, ru to dd. Rosespring's Rutter 1-A, cnw nw 21-33s-2e, spd. Tom Palmer et al's Hull 1, nw ne sw 9-32s-1w, dr 1290 ft. C. L. Husted et al's Evers 1, se se ne 27-31s-2e, dr 220 ft. S. J. Buffington et al's Payne 1, csw ne 10-35s-2e, dr 1050 ft. W. C. McBride and Olson's Kinlund 1, ne nw ne 24-34s-1e, mim.

TREGO COUNTY—Hall et al's Deines 1, se se se 12-13s-24w, acidizing. G. M. Pigott et al's Burkett 1, csw 15-11s-22w, hfw 3490 ft, sd. McNeely et al's John Lemke 1, nw nw sw 7-11s-22w, set 5-in csg 3671 ft. York State Oil Corp.'s Gugler 1, sw sw sw 36-12s-21w, so&w, 3421 ft.

WOODSON COUNTY—Lewis et al's Riggs 1, sw sw sw 10-26s-14w, abd 1500 ft. Holmes et al's Holman 1, se ne ne 25-25s-14e, ru. Ladd et al's Lauber 1, nw nw nw 4-26s-14e, dr 615 ft.

NORTH LOUISIANA

BIENVILLE PARISH—Bowles et al's Bank of Ringgold 1, ne ne 3-15n-9w, top first anhydrite 3250 ft, dr 4715 ft shale. DeSoto O&G Co.'s Dunn & Olsen 1, n½ nw 15-16n-10w, dr 765 ft shale. J. W. Leonard et al's Courtney Hrs. 1, se se 5-17n-7w, elev 215 ft, top anhydrite 4858 ft, top massive anhydrite 5096 ft, top Travis Peak 7015 ft, dr 7070 ft. McDowell et al's Locke 1, ne nw ne 9-15n-9w, elev 180 ft, spd dr 100 ft.

BOSSIER PARISH—Humphrey et al's Bulkley 2, 35-21n-13w, dr 2020 ft. Triangle Drlg. Co.'s Skannal E-1, c s½ 23-17n-12w, 7 in csg 5560 ft, perf csg 5140-50 ft, tested est 5 to 12 mil ft gas, st, old td 5696 ft. United Gas Pub. Serv. Co.'s Skannal F-1, 26-17n-12w, dr 4450 ft; Roos 1, 23-17n-12w, dr 2656 ft.

CADDO PARISH—Prairie River Synd's Hutchinson 1, sw sw 15-15n-12w, elev 152 ft, top Travis Peak 5845 ft, dr 6490 ft. Gulf's Hatcher 1, sw se 11-17n-15w, elev 269 ft, top chalk 1565 ft, top red beds 2589 ft, top second anhydrite 4635 ft, dr 5459 ft.

CATAHOULA PARISH — Adams-La. Co.'s Goodpine Oil Co. 1, ne sw 12-6n-2e, sd 2335 ft.

CLAIBORNE PARISH—E. T. Oakes' Patton Est. 2, ne ne 1-20n-5w, elev 357 ft, hole clean arr core 4987 ft. Sugar Creek Synd's Darrett 2, se sw 31-20n-5w, lub stuck drill stem at 6200 ft, td 8616 ft. United's Taylor 1, 1-19n-5w, spd 13 in csg 300 ft.

DE SOTO PARISH—J. E. Carlson et al's Garland 1, se nw 7-14n-14w, sd 2165 ft. Payne et al's Harris 1, 11-13n-14w, fsh 2200 ft. R. Kamon's Rascoe 1, se nw 14-13n-13w, 10 in csg 61 ft, sd 260 ft. L. S. Fite's Ramsey 1, 36-11n-11w, top Nacatosh 1120 ft, sd 1640 ft, chalk. Armstrong et al's Fee 1, 3-10n-13w, mim.

FRANKLIN PARISH—S. C. Jensen's Bailey 1, c se nw 12-11n-6e, sd 1853 ft, sdy lime.

MOREHOUSE PARISH—Henry E. Rondeau et al's E. M. Clarke 1, ne se 10-20n-7e, sd 3781 ft. Farrell & Jones' D. H. Harp 1, se se 12-22n-7e, rur.

NATCHITOCHES PARISH—Natchitoches Oil Co.'s J. S. Simpson 1, 12-7n-7w, rur. C. D. Morrison's Moffet 1, se se 19-10n-10w, sd 220 ft. Union Pet. Co.'s DeBlieux 2, 83-10n-7w, top chalk 2544 ft, base chalk 2852 ft, top Blossom 3252 ft, sd drilling water well, 3372 ft.

RED RIVER PARISH—Conley et al's Long-Bell 1, ne ne 19-13n-9w, arr deepen 3200 ft.

RICHLAND PARISH—Gulf Oil Corp.'s R. R. Rhymes 15, nw se ne 32-17n-6e, elev 77 ft, top anhydrite 2936 ft, base red beds 6380 ft, dr 6908 ft.

SABINE PARISH—Whitehurst et al's Whitney Corp. 1, c nw ne 8-9n-13w, blew out est 50 mil ft gas show distillate, trying to kill & set csg td 5503 ft. A. H. Tarver's Baker 3, ne nw 36-8n-12w, sd 5200 ft.

UNION PARISH—Federal Pet. Co.'s Series B U 3014, 34-21n-3e, blew out making gas & sw, killed 6 in csg recmtd 2145 ft, woc, td 7021 ft (lower marine).

WEBSTER PARISH — W. D. Ambrose's Crichton 1, sw nw 36-18n-9w, elev 257 ft, massive anhydrite 5008-5300 ft, pb and perf csg 5786-5815 ft, arr swab, old td 5860 ft. Amerada Pet. Corp.'s Crichton 1, 35-18n-9w, lcn. Federal Oil Corp.'s Crichton 1, sw ne se 34-18n-9w, lcn. Phillips Pet. Co.'s Burson 1, c w½ ne 34-18n-9w, lcn. Ohio Oil Co.'s Bodcaw Lbr. Co. 1, c ne se 28-21n-10w, dr 3720 ft. R. M. Coyle 1, c ne se 22-21n-10w, dr 1742 ft. United Gas Pub. Serv. Co.'s Nixon 1, 22-21n-10w, woc 2600 ft. Magnolia Pet. Co.'s Cox 1, 23-21n-10w, spd. R. W. Norton's fee 1, 27-21n-10w, lcn. Woodley Pet. Co.'s C. G. Gray 1, ne ne 27-21n-10w, dr 2100 ft. R. R. Cox 1, sw sw 23-21n-10w, rur. L. C. Cox 1, 28-21n-10w, rur. United Gas Pub. Serv. Co.'s C. V. Davis 2, c nw nw 23-21n-10w, mim.

SOUTH LOUISIANA

ACADIA PARISH—H. E. Dalton's Setting 1, Trilby prospect, 17-9s-1w, td 2405 ft, woc 400 ft.

ALLEN PARISH — Humble's Bel 3, Bel prospect, 28-6s-7w, woc 136 ft.

CALCASIEU PARISH — General Crude's Buhler 1, Buhler prospect, 30-8-9w, dr shale 6025 ft. W. Lahey et al's Bass 1, Niblett's Bluff prospect, 9-10s-12w, mim.

CAMERON PARISH—Magnolia's Johnson Bayou School Land 1, Johnson's Bayou prospect, 16-15s-14w, dr shale 3297 ft. Pure's State Mallard Bay 1, Mallard Bay prospect, 22-13s-3w, woc 1499 ft.

EAST BATON ROUGE PARISH—Cavalier Oil Co.'s Vignes 1, ne of Hope Villa, 40-8s-2e, fsh 5653 ft.

IBERIA PARISH—Texas Co.'s State Fausse Point 2, Fausse Point area, 35-11s-8e, dr shale 5584 ft; same operator's State Vermilion Bay, in Vermilion bay, 16s-5e, fsh 7964 ft.

IBERVILLE PARISH—Humble's Wilbert 1, Bayou Blue, 67-9s-11e, dk.

JEFFERSON DAVIS PARISH — Shell's Sturdevant 1, South Roanoke prospect, 25-10s-4w, dr shale 7219 ft. Stanolind's Calcasieu National Bank 1, South Jennings prospect, 15-10s-3w, dr shale 9808 ft.

ST. MARY PARISH—Mike Hogg's Bayou Teche 1, Charenton, 5-13s-9e, dk.

ST. MARTIN PARISH—Texas Co.'s Lake Mongouloi 2, Lake Mongouloi prospect, 14-10s-9e, dr shale 8510 ft.

TERREBONNE PARISH—Humble's Continental Fur 1, Castell prospect, 30-17s-14e, abn 10,254 ft.

VERMILION PARISH—Continental's Hebert 1, Abbeville prospect, 20-12s-3e, fsh 11,732 ft. Stanolind's Fred Stovall 1, South Abbeville prospect, 89-14s-3e, mim.

MICHIGAN

ALPENA COUNTY—C. W. Teeter's Nevins 1, 18-32n-6e, Trenton 5145 ft, dr 5450 ft. Lester Hemp's Potter 1, 36-32n-6e, sd 240 ft.

ARENAC COUNTY—Tamblyn & Martindale's Buffalo Land Co. 1, 7-19n-3e, sd 2590 f Arenac Oil Co.'s Griffin 1, 1-19n-5e, sd 110 ft. T. F. Caldwell, Inc.'s Mutch 1, 17-19n-4e, deepened 2948 to 2972 ft, bw 2965-72 ft, to pb to Berea and shoot, about 1600 ft, swabbed 12 bbls oil after shot and acid at 2948 ft (Dundee 2765-74 ft). McClanahan Oil Co.'s Mee 1, 11-20n-4e, ne se sw, rig; Seignious 1, 3-20n-4e, se sw se, dr 340 ft.

CLINTON COUNTY—St. Louis Pipe and Supply Co.'s Harris 1, 14-7n-2w, sd 760 ft. Petroleum Exploration Co.'s Schneeberger 1, 11-5n-2w, mim.

GLADWIN COUNTY — Goll, Graves and Mechling's Crigano 1, 36-17n-2w, oil 3850 ft, td 3890 ft (lime), swabbed 20 bbls, 18 bbls, 73 bbls (later after standing shut in 6 days), to treat. C. L. Maguire, Inc.'s Havens 1, 25-18n-1w, dr 3900 ft. Gordon Oil Co.'s Havens B-1, 25-18n-1w, dr 900 ft. Olympia Oil & Gas Co.'s Barnes 1, 22-20n-1w, sd 1308 ft. D. F. Jone's Doane 1, 33-18n-1e, dr 1300 ft.

GRATIOT COUNTY — Red-Man Oil Co.'s Duckworth 1, 9-11n-3w, dr 900 ft. Ed Swearer's Alexander 1, 8-12n-2w, dr 700 ft. R. L. McEboy's Palmeter 1, 18-9n-1w, loc. Max Pray's Wittig 1, 23-11n-1w, 5-in csg 3033 ft. Ithaca Exploration Synd.'s Hart 1, 10-10n-3w, sd 760 ft. Herbert Snell's Smead 1, 11n-4w-20, dr 1260 ft.

HILLSDALE COUNTY—Jacob Beck's Fee

1, 16-6s-3w, sp. B. D. Chandler's Bricker 1, sec 11, Wright twp, dr 1480 ft.

ISABELLA COUNTY—Robbins and Nance's Myer 1, 24-14n-4w, rig. Pure Oil Co.'s Embrey 1, 34-15n-6w, dr 450 ft. Mountain Oil & Gas Co.'s Thompson 1, 17-15n-6w, se se ne, mim. McClanahan Oil Co.'s Cook 1, 15-16n-5w, dr 980 ft.

KENT COUNTY—J. H. Hansen's Garbow 1, 3-10n-9w, sd 1000 ft. Michigan Oil Exploration Co.'s Croff 1, 35-7n-9w, sd 5570 ft.

LENAWEE COUNTY—Socony-Vacuum Oil Co.'s Downing Est. 1, 36-6s-5e, 5-in csg 3215 ft.

LIVINGSTON COUNTY — Louis Myer's Cassidy 1, 5-4n-3e, loc. Herbert Snell's Zebb 1, 34-2n-5e, sd 5017 ft. J. E. Flannigan's Curdy 1, 18-3n-5e, ne ne se, ru.

MECOSTA COUNTY—W. J. Bernier's Fitzgerald 1, 9-13n-9w, sd 3674 ft. Columur Oil Co.'s Bell 1, 6-14n-8w, dr 2600 ft.

MONTCALM COUNTY—K. B. Montigel, Tr.'s Loree 1, 18-9n-5w, 5-in csg 3075 ft. Daily Crude Oil Co.'s Weatherby 1, 20-12n-9w, sw sw se, dr 350 ft.

SAGINAW COUNTY — W. R. Borough's Fortney 1, 29-11n-4e, dr 3100 ft. Hume Oil Co.'s Schwigner 1, Frankenmuth twp, sec 5, nw ne sw, br. Jaenickie Oil Co.'s Moulton 1, Richland twp, sec 31, sw nw sw, loc.

MISCELLANEOUS: Allegan County—Russell Sapp's Hudson 1, 29-2n-12w, dr 880 ft. Clare County—A. Hansen's Fee 1, 26-17n-5w, sd 3898 ft, hfbw. Iosco County—H. Barton's Goupil 1, 9-21n-5e, dr 200 ft. Mackinac County—Van Kuren and Montigel's Hiawatha Club 1, 17-44n-9w, csd 5-in 1005 ft. Missaukee County—M. J. Ingold's Donley 1, 31-22n-8w, fsg 1070 ft. Otsego County—Harley William's Raae 1, 15-30n-1w, dr 950 ft. Shiawasse County—Cardinal Crude Oil Co.'s Haviland 1, 31-5n-3e, dr 1660 ft.

MISSISSIPPI

BOLIVAR COUNTY—White & Jones' Ballou 1, ne ne 18-24n-7w, arr test 1680 ft.

CLAIBORNE COUNTY—Claiborne County Dev. Co.'s Ruth Hayden 1, 56-11n-2e, lcn. Claiborne O&G Drlg. Co.'s Crawford 1, 6-13n-4e, dr 1405 ft.

GRENADA COUNTY—H. T. Salter et al's Carpenter 1, nw se 5-21n-7e, elev 344 ft, dk & mir.

HINDS COUNTY—Chichester et al's Gerwin 1, sw nw 12-5n-4w, elev 153 ft, rur (reported spd in error).

KEMPER COUNTY—R. A. Keaton et al's Buckwalter Lbr. Co. 1, nec 6-10n-14e, dk.

LAMAR COUNTY—Sun Oil Co.'s Scanland & Semmes 1, c sw ne 28-4n-15w, spd.

PERRY COUNTY—Fred E. Courson's Newman Lbr. Co. 1, nw nw 26-1n-9w, mim.

SIMPSON COUNTY—Goodwill O&G Co.'s Berry 1, 33-2n-4e, dk & mir.

WILKINSON COUNTY—T. S. Stoneman et al's L. T. Ventress 1, ne sw 38-2n-3w, spd.

YALABOUSHA COUNTY — G. M. Langston et al's W. C. Bryant 1, ne sw 21-24n-6e, dk & mir.

MONTANA

BIG HORN COUNTY—E. A. Lammers & Son's Berthold 1, se se 6-1s-32e, dr 249 ft.

CARBON COUNTY—East Bridger Oil & Gas Co.'s 1, s se se 23-6s-23e, dr 660 ft. Round Butte Oil Co.'s 2, w ne se 3-6s-23e, dr 319 ft.

CASCADE COUNTY—C. Leonard Smith's Hines 1, se sw se 14-22n-2e, dr 251 ft.

FERGUS COUNTY—Emmons et al's 3, se en ne ne 6-21n-18e, dr 691 ft. Judith Operating Co.'s Government 2, w nw ne 35-22n-17e, dr 2994 ft.

JUDITH BASIN COUNTY — Fletcher P. Hunt's Hobson 3, ne 10-14n-15e, dr 1451 ft.

PETROLEUM COUNTY—H. Clark Rowland et al's Kalispell 1, ne ne se 35-14n-25e, dr 381 ft.

PONDERA COUNTY—Montana Power & Gas Co.'s Berger 1, cne 31-31n-4w, ru. Klinch Petroleum Co.'s Hollam 1, nw nw nw 12-28-6w, sd 2345 ft.

SHERIDAN COUNTY—Cheyenne Oil & Gas Co.'s Olson 1, ne ne 15-35n-53e, dr 1490 ft.

TOOLE COUNTY—Jack Reynold's 1, 5-37n-31e, is a new location.

YELLOWSTONE COUNTY — R. C. Tarrant's Mosher 1, w sw ne 25-3w-25e, dr 1135 ft.

NEW MEXICO

LEA COUNTY—Argo Royalty Co.'s B. T. Lanehart 1, sw se ne 21-25s-37e, elev 3071 ft, set 8⅝ csg at 2698 ft, small gas show at 2810-2814 ft, dr sandy shale at 2850 ft. Baldridge et al's Blakey 1, c nw ne 5-20s-38e, e of Monument, rur. Brown and Reynolds' Parcell 1, c nw se 8-21s-38e, dr 100 ft sand and gravel. C. & G. Oil Co.-The Texas Co.'s Ellen Weir 1, c ne ne 14-20s-37e, elev 3564 ft, top anhydrite 1348 ft, td 4075 ft lime, pb to 4064 ft, perforated cas at 4037-4048 ft and 4048-4058 ft, acidized with 500 gals and then 1500 gals, swabbed 21 bbls fluid in 18 hrs, 4% water, acidized with 4000 gals, swabbed 2 bbls fluid hr, 25% water. Barney Cockburn & Rowan-Nichols Oil Co.'s H. G. Mattern 1, c sw se 7-22s-37e, elev 3426 ft, td 3789 ft lime, fsh for several jts tubing. Conoco & California Co.'s E. M. Elliott 1-A-15, se se se 15-22s-37e, elev 3354 ft, dr 1650 ft anhydrite; Elliott 1-A-21, c se se 21-22s-37e, elev 3338 ft, gas show at 3507 ft, dr sandy lime at 3512 ft. Culberson, Erwin & Stovall's J. R. Stuart-Repollo 2, nw se se 10-25s-37e, dr 715 ft Red Beds. Emperor Oil Co.'s State 1, c sw sw 5-21s-35e, elev 3652 ft, td 1630 ft Red Beds, rust. Gulf Oil Corp.'s L. M. Buffington 1, c nw sw 13-25s-37e, elev 3091 ft, td 3903 ft lime, shot off drill pipe at 3400 ft, fsh for several jts; S. J. Carr 1, c nw sw 3-24s-37e, elev 3267 ft, pb fr sul w at 3886 ft to 3625 ft, shot 290 qts nitro at 3521-3600 ft, used 500 gals acid, shut in 3 days, pumped 20 bbls oil in 6 hrs and pumped off, completed; Cutter 1-B, c sw sw 21-19s-37e, e edge Monument, lcn; F. C. King 1, c sw nw 5-23s-37e, elev 3371 ft, td 3788 ft, shot 250 qts nitro 3696-3783 ft, used 2000 gals acid, swabbed dry, dd to 3877 ft, had slight saturation 3858-3866 ft and 3874-3877 ft, swabbed dry, drilled to 4052 ft td lime, dry and abandoned. Jal Nat'l Gas Co.'s C. T. Bates-Humble 1, c nw sw 20-25s-37e, elev 3049 ft, td 2865 ft sand, flowed 25 million ft gas from pay at 2707-2865 ft, completed as gas well. Harry W. Leonard et al's B. T. Lanehart 3, c ne nw 21-25s-37e, ru. Magnolia's E. O. Carson 2, c nw nw 33-21s-37e, elev 3471 ft, gas show at 2542-2548 ft, oil show at 3075-3080 ft, dr lime 3420 ft; John Scharbauer-Eidson 1, c nw se 29-16s-35e, elev 4014 ft, dr lime 4764 ft. Ohio Oil Co.'s Anna Walden 1, c ne ne 21-22s-37e, elev 3364 ft, gas show at 3458-3490 ft, oil shows at 3522 ft and 3560-3566 ft. td 3636 ft lime, estimated 15 bbl oil well, shot with 260 qts from 3518-3612 ft, fsh for tools. N. G. Penrose & Rowan-Nichols Oil Co.'s Will Cary-Humble 3, c se nw 22-22s-37e, elev 3364 ft, td 1150 ft anhydrite, waiting for standard tools. Plains Prod. Co.'s J. A. F. Knight-Humble 2, c ne sw 14-24s-37e, dug cellar and pits. Repollo Oil Co.'s York 1, se se ne 20-21s-37e, semi wildcat 1 mi n of prod in North Eunice sandy lime belt, lcn. Republic Prod. Co.'s R. S. Crosby 2, nw nw sw 28-25s-37e, elev 3024 ft, td 3310 ft sandy lime made about 160 bbls into pits in 14 hrs from 3310 ft, shot at 3150-3260 ft, acidized with 1000 gals, flowed 50 bbls fluid daily with 10 million ft gas. Rushwold Oil Co.'s E. E. Carter 1, c nw ne 30-20s-39e, wildcat near Nadine, sd 40 ft caliche, bldg road. Samedan Oil Corp.'s S. B. Hughes 1, c ne sw 4-23s-37e, elev 3321 ft, td 3400 ft lime, set 7 in csg 3380 ft, wocs. Skelly Oil Co.'s Ellen Sims 1-A, c sw se 3-22s-37e, elev 3300 ft, td 3662 ft lime, show oil and gas 3522-28 ft, gas 3535 ft, oil at 3535-3550 ft, flowed 15 bbls oil hr while cleaning out at 3550 ft, after shot with 90 qts from 3498-3565 ft; F. S. Stuart 1, c ne nw 15-25s-37e, elev 3107 ft, shot 130 qts nitro 3364-3416 ft, pb to 2230 ft, set top whipstock at 2000 ft, dr by it to 2298 ft, hit fish, sd for orders. Stanolind O&G Co.'s P. J. Langley 1, c se nw 15-25s-37e, elev 3109 ft, dr anhydrite and salt at 1980 ft. W. H. Street et al's Wood-Humble 1, near c se ne 22-22s-37e, elev 3355 ft, sd 250 ft sand. The Texas Co.'s E. D. Fanning 1, c se ne 4-24s-37e, elev 3293 ft, pb fr sul w at 3701 ft to 3656 ft, shot 300 qts at 3543-3634 ft, waiting on pumping equipment; Jas. F. Black 1, c sw ne 21-24s-37e, elev 3220 ft, ru machine; J. D. Young 1, se se se 5-24s-37e, elev 3277 ft, dr Red Beds at 620 ft. Talbot and Mullineaux's Quincy-Ricker 1, c se se 7-16s-36e, sd in sand at 200 ft. Tide Water Oil Co.'s State 1-I, sw se sw 16-20s-37e, se edge Monument, set 12½ in cas at 231 ft, td 235 ft Red Beds, wocs.

OKLAHOMA

ATOKA COUNTY — A. I. Sanders et al's Redden 3, se sw sw 19-1n-15e, spudding.

BECKHAM COUNTY — Mid-American Oil Co.'s Biscoe 1, sw sw sw 28-8n-22w, set 10-in csg 842 ft.

CADDO COUNTY—Wasteka Oil Co.'s Griffin 1, sw se ne 27-6n-10w, td 6570 ft.

CARTER COUNTY — Carter et al's Leon Voorhees 1, cse sw 34-5s-2w, abd 8648 ft. The Texas Co.'s Cathey 1-B, se ne ne 6-5s-1e, woc.

CLEVELAND COUNTY—H. R. Hollenback et al's Stinson 1, nw nw ne 17-9n-2w, rig.

COAL COUNTY—Sinclair Prairie's Culver 1, ne ne sw 16-1n-8e, fsg 4940 ft. Continental's Kirby 1, sw se sw 23-1n-8e, set 9-in csg 1420 ft. Continental's Breedlove 1, nw sw sw 24-1n-8e, dr 2174 ft. Carter's Warne 1, ne ne nw 31-3n-9e, dr 1600 ft. Shell's Hill 4-A, cnw nw 30-3n-10e, spd. Continental's King 1, ne sw ne 26-1n-8e, dr 3813 ft.

COMANCHE COUNTY — William Davis' Aetna Life Ins. Co. 1, se ne ne 22-2n-15w, sd 160 ft. L. D. Wise et al's Cones 1, se se sw 11-1n-10w, sd.

COTTON COUNTY—Phillips' Warren 1, ne ne se 1-5s-13w, rust.

GARVIN COUNTY—Luttrell et al's Howell

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1, nw se nw 34-1n-1e, sd. B. F. Lundy's G. C. Prince 1, ne ne se 32-1n-2w, sd 2552 ft Ellison & Hammond et al's Silby 1, cnw nw 24-2n-3w, mit. Tidewater et al's Sturdevant 1, ne ne nw 28-4n-1e, dr 1540 ft. Pure's Isaac 1, se se se 6-2n-1e, lcn.

GRADY COUNTY—Art Holt et al's Ramsey 1, ne se ne 31-5n-8w, der. Graham et al's Castleberry 1, sw se nw 8-5n-7w, sd 1906 ft. Ray Stevens et al's Mays 1, ne ne ne 31-5n-8w, dr 4939 ft.

HUGHES COUNTY—T. P. McAdams & Barnes' Koch 1, sw ne ne 1-9n-10e, pb 2600 ft, woc. Southern Oil Co.'s Buck 1, se ne sw 21-8n-10e, rust. Blackwell O&G Co.'s Vargee 1, se ne nw 29-9n-9e, abd 3474 ft. Sivil et al's Montgomery 1, nw sw nw 7-9n-9e, co 3498 ft.

JACKSON COUNTY—Jackman's Fee 1-A, sw sw sw 27-1s-24w, dr 2890 ft.

JEFFERSON COUNTY—Red River Oil Co.'s Trout 1, se ne ne 6-8s-7w, woc. Pearson et al's Douthitt 1, ne ne ne 24-6s-9w, dr 3450 ft. Mid-Continent Pet. Corp.'s G. S. Reid 1, csw nw 32-6s-4w, loc.

KAY COUNTY—Texas Co.'s Fulton 1, se se se 18-27n-4e, set 8-in csg 2555 ft. Denver P&R's School 1, se nw ne 13-26n-1w, dr 4137 ft. Robert Wilson et al's Dickerson 1, ne ne sw 20-29n-1w, set 8-in csg 2645 ft. Max Kelley et al's Johns 1, nw nw nw 35-27n-4e, spd.

KIOWA COUNTY—Travis & Scott's Doyle 1, ne se sw 21-5n-17w, td 937 ft. Argus Pet. Co.'s Osbourne 1, nw nw ne 9-7n-16w, dr 700 ft. Rush C. Roberts et al's Funkhouser 1, se nw nw 25-7n-17w, dr 525 ft. Lykins et al's Aetna Life 1-A, se se se 8-5n-16w, dr 525 ft. Pendelton & Vaughn's Smart 1, se nw se 12-6n-17w, ru & sd.

LINCOLN COUNTY—Kemp and Continental's Lobaus 1, nw sw nw 21-17n-5e, rig. Skelly's Sporn 1, nw ne sw 21-17n-3e, rur.

LOGAN COUNTY—Helmerich & Payne's Hasler 1, nw nw se 14-16n-4w, spudding.

LOVE COUNTY—Sinclair Prairie's Stockton 1, se se sw 26-6s-2w, to pb. Riddle et al's Johnson 1, csw se 20-8s-2w, dr 3850 ft.

MARSHALL COUNTY—Helmerich & Payne's Taliaferro 1, nw se sw 26-5s-5e, dr 5400 ft.

McINTOSH COUNTY—Deickman's McIntosh 1, se se se 4-12n-17e, sd 1270 ft. Stanolind and Ramsey's Tiger 1, nw nw sw 13-9n-15e, rur.

MURRAY COUNTY—Hernsby & Jones' Sadler 1, ne ne nw 20-1n-2e, sd 2652 ft. Power Oil Co.'s Lancaster Trust Co. 1, csw ne 10-1s-2e, dr 1582 ft.

NOBLE COUNTY—Stanolind and Amerada's Gillham 1, ne se se 14-22n-1e, abd 4669 ft.

PITTSBURG COUNTY—Oklahoma Dist. Co.'s Beeler 1, ne ne sw 7-7n-14e, dr cement. Pendelton & Vaughn's Hobb 1, cse nw sw 7-6n-16w, est 2 bbls oil per hr on pump.

SEMINOLE COUNTY—Tom Phillips and Kimraw Drlg. Co.'s Chemperney 1, se se nw 7-6n-7e, abd 4085 ft, Rudco O&G Co.'s Butner 1-A, ne ne sw 15-9n-8e, sd 1950 ft. Kennedy et al's Bowlegs 1, nw nw se 3-8n-7e, loc. Amerada et al's Yarhola 1, ne nw nw 36-10n-7e, rig.

STEPHENS COUNTY—Ed Parson's Olson 1, csw sw 21-2n-8w, mit. Texas Co.'s Bohanan 1, ne nw nw 15-3s-15w, mach. T. M. McCasland's Hildebrand 1, sw sw ne 1-3s-7w, sd 4601 ft.

TEXAS COUNTY—Allison and Barnhill's Bingley 1, sw sw ne 30-2n-18e cm, sd 830 ft.

TILLMAN COUNTY—Bernheim's Tate 1, ne ne nw 16-1s-19w, sd 3001 ft. Beal & Toler's Magell 1, se se se 18-1n-16w, sd 250 ft.

EAST TEXAS

ANDERSON COUNTY—Gulf Oil Corp.'s M. J. Ross 1 (54.7-ac), Robt. Erwin sur, Camp Hill area, elev 487 ft, top Georgetown lime 5452 ft, top Trinity series between 6472-6501 ft, top anhydrite stringer 7941 ft, td 8383 ft in shale and lime of lower Glen Rose formation, drill stem test made at 8053-8383 ft, open 10 minutes, with ⅜ in choke on bottom, well showed 1000 ft mud, no show oil or gas, and 2000 ft clear salt water, then was abandoned. Tide Water-Seaboard Oil Corp.'s J. N. Edens 15 (988.6-ac), Sam Snider sur, Cayuga field, elev 313 ft, top Georgetown lime 4619 ft, top upper Glen Rose 6040 ft, top anhydrite 6995 ft, top lower Glen Rose 7350 ft, showed 3,000,000 ft gas and dark colored distillate on dst at 7350-7414 ft, made d st at 7488-7535 ft, then ran electric logging device, cemented 7 in cas at 7364 ft, td 7570 ft in hard black shale and lime, washed one hr, began flowing, showed 10¼ million ft gas daily, flowed 14 bbls 62 gravity distillate in one hr, with ⅜ in choke on tubing and ¼ in choke on cas, later opened well for 8 hrs and in that period it made 16 bbls 62.5 gravity distillate per hr, with 11 million ft gas through ¼ and ⅞ in chokes on cas and ½ and ⅜ in chokes on tubing.

BOWIE COUNTY—Fay T. Chew and Brassett's Byron Barkinson 1 (90-ac), J. W. Parkham sur, 2½ mi n Leary, sp and sd. Ferguson and Hill's A. Y. Breckenridge 1, Nancy Dycas sur, 4 mi w Texarkana, sp and sd. Woodley and Bentley's J. D. Lumpkin 1 (245-ac), John McDermott sur, 1¼ mi sw Dalby Springs, elev 290 ft, Annona chalk 1665-2090 ft, sd 3665 ft.

CHEROKEE COUNTY—John G. Mayo et al's E. W. James-Pure 1 (50-ac), Jessie T. Jones sur, 4½ mi sw Rusk, set surface cas at 400 ft.

COLLIN COUNTY—Port Bolivar Co.'s O. G. Durning-Clarkston 1-A (140-ac), Wm. Creager sur, Pat. 1193, elev 722 ft, show gas 4039-70 ft, sd 4094 ft; A. Shirley 1 (50-ac), Gwynn Morrison sur, 1 mi e Anna, dk.

DELTA COUNTY—W. S. McGee et al's Mrs. P. W. Miller 1 (52-ac), E. Spencer sur, 1 mi sw Cooper, sd 3040 ft shale.

FALLS COUNTY—J. Edward Mills et al's Sam Grucholski 1 (40-ac), Dennis Herold League, 5 mi sw Kosse, elev 521 ft, Austin chalk 2765-2946 ft, Georgetown lime 3544-3825 ft, top Edwards lime 3867 ft, dr lime 4025 ft. R. M. Heflin et al's Battle 1, cemented 10 in cas at 40 ft.

FRANKLIN COUNTY—Atex Oil Co.'s R. L. Jaggers 1, I. Humphreys sur, 1½ mi nw Winfield, elev 398 ft, Pecan chalk 1810-1850 ft, sd 3018 ft. Virginia Hudson et al's B. M. Patterson 1, E. Rice sur, 3 mi sw Hagansport, elev 411 ft, dk.

FREESTONE COUNTY—Fred R. Lovering et al's E. Bonner-Scott 1 (23-ac), H. Awalt sur, 7 mi n Fairfield. Stanolind O&G Co.'s J. S. Cullinan 1 (365-ac), E. G. Rector sur, Cayuga area, Austin chalk 3185-3525 ft, top Woodbine 3872 ft, cemented 7 in cas at 4024 ft, woc.

GRAYSON COUNTY—P. A. Shaner's Blair 1, sd 2020 ft.

HENDERSON COUNTY—Wm. McDougal, Tr. et al's Elvira Price 1 (216-ac), M. Matthews sur, 3½ mi s Trinidad, elev 294 ft, sp and sd. Cortex Oil Co.'s Horton 1, Pecan Gap 2252-2462 ft, top Austin chalk 3210 ft, dr 3515 ft chalk. S. Sparks, Keeley et al's Theo. H. Berry 1, Aaron York sur, No. 847, 5 m s of Brownsboro, lcn. H. L. Parsons-Atex Oil Co.'s H. L. Wyatt 1 (140-ac), Simon Sanchez sur, 3½ mi sw Chandler, elev 346 ft, Austin chalk 4200-4553 ft, top Woodbine series 4825-4835 ft, cored water sand at 4878-4890 ft, no show, sd for orders.

HOPKINS COUNTY—Empire O&R Co.'s J. E. Worsham 1 (150-ac), Alex O. Wetmore sur, Sulphur Bluff area, lcn. Walter Goldston et al's H. J. Smith 1, I. A. Croft sur, 3 mi se Sulphur Bluff, dk. W. P. Chandler et al's J. K. McLaren 1, Alex O. Wetmore sur, lcn in 5 ac tr.

HOUSTON COUNTY—E. R. Mount, Branch et al's Dr. P. S. Griffiths 1 (136-ac), Frank Johnson sur, 3 mi sw Crockett, ru. Boone Bros.' Texas Long Leaf Lumber Co. E-1, dr sand and shale 1053 ft. Robert Reagan, J. C. Barnett et al's A. B. Spence 1 (75-ac), J. F. Martin sur, ½ mi sw Grapeland, lcn abn.

HUNT COUNTY—Penn Oil Corp.-Elmer S. & Fox Wood's A. B. Manning 1 (57½-ac), Sally Owens sur, 5 mi ne Lone Oak, elev 599 ft, dk.

KAUFMAN COUNTY—E. G. Colton, R. P. Lester et al's Barrow Bros. 1 (40-ac), J. D. Taylor sur, 8 mi ne Elmo, elev 528 ft, top Georgetown lime 4194 ft, top Paluxy series 4773 ft, top upper Glen Rose 5165 ft, top massive anhydrite 5742 ft, fishing 5968 ft.

LAMAR COUNTY—J. A. Forester et al's J. S. Woodward 1 (18¾-ac), J. W. Woodward sur, 1½ mi e by s of Minter, elev 402 ft, top Georgetown lime 2256 ft, Paluxy sand 3060-3144 ft, top anhydrite 3735 ft, base hard anhydrite 4075 ft, broken to 4105 ft, sd 5129 ft sand.

LIMESTONE COUNTY—C. L. Lytle's Thompson 2, sd 6059 ft.

NAVARRO COUNTY—Calto Oil Co.'s Etta Black 1 (266-ac), B. G. Balthrop sur, 2 mi sw Bazette, lcn for 6000 ft test, mim. Ed. W. Bateman and P. S. Groginski's S. P. Love 1, Lanmontine sur, 2 mi sw Corsicana, elev 425 ft, top Austin chalk at 1163 ft, dr 1300 ft.

RED RIVER COUNTY—J. S. Abercrombie Co.-Harrison Oil Co.'s Southern Pine Lumber Co. 4 (392.37-ac), D. D. Bruton sur, elev 407 ft, dr 460 ft shale. T. J. Farrington et al's W. T. Morris 2, dr 825 ft. F. D. Jones et al's Monkhouse Bros. 1 (125-ac), John Ware sur, 10 mi n Clarksville, dr lime at 1035 ft. Dale Sneed, R. H. Manning and Texfornia Co.'s Hooker-Hughes 1 (80-ac), MEP&P Ry. sur, No. 642, 6 mi sw Lydia, elev 307 ft, Pecan chalk 995-1302 ft, top Austin chalk 2018 ft, sd 2720 ft, hard black shale.

ROBERTSON COUNTY—J. Edward Mills et al's Tony Congelosi 1 (75-ac), Geo. A. Nixon sur, 3½ mi sw Hearne, sd 420 ft.

RUSK COUNTY—John W. Merritt et al's J. A. Stallings 1 (47-ac), Thos. Uzzell sur, 2½ mi s Eatex field and ¼ mi sw Pleasant Grove, sd 1920 ft.

SMITH COUNTY—Carolyn and Hastings et al's Bennett 1 (80-ac), Robt. Walters sur, 3 mi ne Winona, sp and sd.

UPSHUR COUNTY—B. L. Watson et al's W. O. Irwin 1, D. R. Cannon sur, 3 mi ne Coffeeville, dug pits.

EAST TEXAS BORDER COUNTIES

HARRISON COUNTY—Overtex Oil Co.'s Platt 1, F. C. Baker sur, elev 276 ft sd 5160 ft. Weiss et al's W. L. Rudd 1, Wm. Steele sur, lcn. Hanover, Bergendoll et al's Buchanan 1, Wm. McIlvain sur, sdtr, td 4120 ft.

PANOLA COUNTY—Gulf's Pierce & Chesbro 1, J. H. Shahan sur, elev 233 ft top Pecan Gap, 1414 ft, top Georgetown lime 2550 ft, top anhydrite 4778 ft, dr 5010 ft. A. C. Glassell's Frost Lbr. Co. 1, Mary S. Potts sur, elev 216 ft, base massive anhydrite 4858 ft, dr 5585 ft. Danciger O&R Co.'s J. W. Tatum 1, Alfred Bissell sur, sd 21 ft. Logansport P.L. Co.'s Rushing 1, Manna Smith sur, elev 180 ft, sd 2694 ft. Magnolia Pet. Co.'s Hull 1, Thos. Applewhite sur, mim. Motex Oil Co.'s J. M. Furrh 1, J. M. Alston sur, lcn.

SHELBY COUNTY—Rubeling & Potter's O. H. Polley 1, Wm. Whisner sur, sd for heavier rig, 4200 ft. Mulroy & Curtin's C. Hayden 1, D. F. T. Yordt sur, dr 2248 ft. H. A. Stebbinger et al's Pickering Lbr. Co. 1, C. E. Henry sur, 5 in cas 4998 ft sl, sd 5029 ft oolitic lime.

SOUTH TEXAS

ATASCOSA COUNTY—Atascosa Trust's U. A. Doumch 1, 152-ac tr, blk 10, J. T. Russell sur No. 1222, 3 mi n Poteet, set 7 in cas 3460 ft, top chalk 3503 ft, td 4008 ft, pb to 3500 ft, acidized with 2000 gals, swabbed dry after acidizing, stood 10 hrs, swabbed to btm and stood 50 ft fluid in hole, rec abt 3 bbls oil and fluid, swabbing, show some oil. Helvetia Oil Co.'s Susie Pratt 1, 176-ac tr, F. de la Garza sur No. 46, 1 mi nw Anchorage, sand and sandy shale 2249-2300 ft, set 7 inch cas 2245 ft, swabbed abt 3 bpd 44 grav oil, td 3116 ft, pb to 3000 ft, set 800 ft of 4½ in liner, swabbed dry through tubing, pulled liner, dr 3576 ft, dry serp.

BASTROP COUNTY—American Pet. Exploration Co.'s Martha Freytag 1-A, 50 ft e No. 1, dr in shale 410 ft. Paul C. Teas' Clemont Vinklarek 1, 100-ac tr, S. Millett League, 10 mi s Smith Villa, dr sandy shale 5368 ft, top Wilcox 1320 ft, top Carrizo 1250 ft.

BEE COUNTY—W. V. Bowles' C. Mengers Sr. 1, W. Allen sur, 100-ac tr, 4½ mi w of Skidmore, ran electrical formation test, dr ahead 5280 ft. Randon Oil Co.'s Handy Bros.' 1, center nl and sl dividing blks 12 and 13, Howeth & Swiger subd of Handy Ranch, Jeremiah Tool sur, ab 66, 6 mi ne Skidmore, dr 3154 ft. Siznod Oil Corp.'s A. M. Holzmark 1, 20-ac lse, in Samuel May sur, 1½ mi se Voss field, dr 1720 ft. Sure Oil Co.'s N. L. McKinney 1, J. W. Williamson sur, 1 mi n Tuleta, dr 3600 ft.

BEXAR COUNTY—Algra Oil Co.'s Edward C. Peters 1, sur 5, sec 4 Miguel Gotari sur, 13 mi se San Antonio, sd 510 ft, 8 in cas formerly

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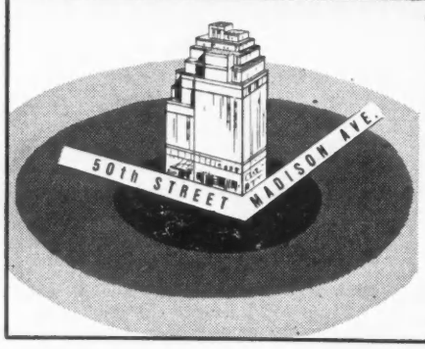

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set 435 ft, lowered to 478 ft. American Gas Co.'s Oliver 5, 400-ac tr, M. F. Rodriguez sur, dr 3248 ft lime, ur. Carter & Ingersoll's Louis Mann 1, 83.5-ac tr, Stephen Jett sur 53, 3 mi s Von Ormy, sd 1357 ft. Mayers & Smith, H. E. Bass et ux 1, 73.5-ac tr, F. A. Ruiz sur No. 47, 2 mi se Von Ormy, lcn for 1100 ft Austin chalk test, dropped until work begins. Raymond Pulliam's E. J. Lamb 1, 617-ac tr, Francisco Farias sur 15, 4 mi fr Elmendorf, D&A 3034 ft, td in Edwards limestone. W. R. Swearington et al's Franz Woelfler 1, 70-ac tr Jose de la Garza sur, ¾ mi ne Elmendorf, sd 1535 ft, high water. R. P. Whitefield's Col. John Sweeney 1, GH&SA RR sur, 11 mi sw San Antonio, td 806 ft, sand and shale 784-804 ft, 6⅝ in cas at 800 ft, sd, dropped until work begins. Woodward & Hardie's R. W. Devilbiss 1, John Devilbiss sur, 1 mi s Thelma, td 2248 ft, set 7 in cas 2204 ft, fsg for liner 2284 ft.

BROOKS COUNTY—The California Co.'s Mrs. B. Garcia 1, tr No. 3 Las Mestinas de Gonzaline gr, Alta Mesa dist, td 8022 ft, pb and perf 3020-28½ ft, made water with scum of oil, cemented perf, reperf 3025-28½ ft, comp 75 bpd gas device, pb to 2500 ft, perf 2459-77 ft, production increased to 50 bpd.

BURLESON COUNTY—Red Bank Oil Co.'s Nellie Gramm 1, Eliza Santef sur, abt 2500 ft nw of company's No. 1 Crain, 7 mi w Chreisman, td 4935 ft, pb to 4500 ft to straighten hole, dr in shale 4837 ft.

CALDWELL COUNTY—Brown Drlg. Co.'s W. J. Pope 1, John D. Rains sur, 8 mi se Lockhart, dr 1025 ft. Marts & Beavens et al's Mrs. A. Moody 1, 189-ac lse, S. Seal sur, 2 mi Wheeling, dr shale 850 ft. J. G. McKenzie's J. M. Pierce 1, 150 ft nwl and swl e 50-ac lse S. Seal League, w of Luling, ru. H. B. Starkey's (J. J. Elam et al) Francis-Brown-Cochran 1, W. F. Young sur, 3 mi e Luling, sand with so&g 1742-47 ft, set 5 3/16 in cas on packer, completing when bailer blown out of hole, attempted to core in sdtr hole 1735 ft, went into old hole, now sd. Taylor Ref. Co.'s Miears 1, 134-ac tr, N. Kelly sur, ½ mi w Dale Field, D&A in Georgetown 2745 ft. Terminal Oil Products et al's A. P. Doyle 2, 100-ac tr in Andrew Churchill sur, 8 mi sw Lockhart, 1200 ft fr No. 1, D&A 2011 ft, top ch 158 ft, top Edwards 1976 ft, top Buda 1816 ft, top Georgetown 1929 ft.

CALHOUN COUNTY—Hiawatha Oil Co.'s John Roemer 1, J. J. Ogsberry sur, 8 mi s Port Lavaca, td 7112 ft, set 8⅝ in cas 5900 ft. Continental Oil Co.'s Austin 1, sec 12, blk "H" Pedro Garcia sur, 1 mi n of other heaving shale wells, Seadrift prospect, sec 11, ¾ in cas at 6598 ft, td 8825 ft, ds struck at 8521 ft, set cas to btm, ran 2½ in tubg to 8521 ft, swabbed down to 8400 ft cutting out 6 in cas, pb, td 8521 ft, 1st cement job failed to hold, cemented again, set w/s 8471 ft, now milling to sdtr 8450-54 ft. Humble & Plymouth's P. H. Welder 3-A, Agaton Sisneros sur, sand 4868½-68 ft, dst in sand flowed oil 17 min ¼ in btm ch, ⅜ in top ch, 60 lbs pres, set cas at 4866 ft, comp 1.76 pbh, 9/64 ch, tp 800 lbs, cp 1650 lbs.

DE WITT COUNTY—Universal & Glaspie's Schubel 2, 300 ft ne No. 1, td 1560 ft, prep test a little show.

DUVAL COUNTY—Benedum & Trees' Clara Driscoll Sevier 1, Driscoll 6039-ac tr, Palo Blanquite gr, 2 mi ne Realitos, ru. Frank Buttram's NL&L Co. 1, sur 102, 5 mi nw Eagle Hill, sd 1925 ft. Cole Pet. Co.'s W. R. Peters 2, sur 795, 1 mi e of Lopez field, D&A 2783 ft. Frank C. Gravis' Gravis et al 2, sur 250, 10 mi sw San Diego, dr ahead 2712 ft; Schallert 1-A, sec 555, Palagana salt dome, oil show in sand 2730 ft, dst 2730-44 ft, rec 500 ft oil, 300 lbs pres, 2½ min, set 7 in cas top sand, swabbed down 750 ft off btm, would not flow, installed flow valves, flowed 10 bph 43.7 grav oil. Tom Graham's S. Sutherland 2, ne¼ sur 188, 3 mi e Peters field, coring 2509 ft. Harvey & Henderson's J. F. Welder heirs 1, 330 ft nl, 990 ft el n 80-ac in sur 102, ru. Lipscomb & Daubert's W. R. Peters 1, J. Tigert sur 321, 2½ mi e Lopez field, dr 500 ft. Mid-Continent Pet. Corp.'s W. K. Peters 1, nw¼ 159, D&A 2828 ft. Pan American Prod. Co.'s J. F. Welder heirs 1-H, 160-ac lease in sur 103, 1 mi sw of Loma Vista, showed gas on dst of upper Loma Novia sand, dr to 3006 ft, pb to 2866 ft, set 7 in cas 2822 ft, bad cement job, cement cas for 4th time, swab dry through cas, bridge of 1000 ft in hole, co bridge, pb 2863 ft, 7 in cas 2825 ft, sd. Rogers & Rogers' Valdez 1, 80-ac lse, Mesquite gr, td 2948½ ft, sand 2938½-48½ ft, set cas, tested dry, coring deeper. Shell Pet. Corp.'s J. M. Taylor 1, nw/4 sur 214, 3 mi sw Seven Sisters field, dst 2847-68 ft, rec 120 ft, brackish muddy water, no pressure, slight show of gas ⅜-⅝ in chokes, 10 min, td 3156 ft, pb and perf 2819-25 ft, tested sw, pb 1710 ft, perf 1569-71 ft with 30 shots, show sw and some o&g; J. F. Welder heirs 1-B, 79.3-ac lse in sur 69, 1¼ mi n of Loma Vista field, 3 attempts to dst in sandy shale 2863-74 ft failed, td 3242 ft in shaley gray water sand, run electric formation test, pb, td 2874 ft in sh, set cas, bad cement job, recemented, made squeeze cement job, pb 2854 ft, dr plugs. E. R. Thomas et al's Atlee Parr 3, 12.59-ac tr, sur 26, sand 4002-10 ft, set cas on btm, perf swabbed dry, 5 in liner, sand 4697-4718 ft, showed considerable saturation, set 5 in liner, swabbed sw, recemented, tested sw, sd woc.

EDWARDS COUNTY—M. R. Phillips' Turney 1, sec 164, Wyatt sur, sd 750 ft, dropped until work begins. Plateau O&G Co.'s Mrs. R. L. Hatch 1, J. W. May sur, sec 66, HE&WT RR sur, dr 1302 ft, running 10 in cas.

FRIO COUNTY—Amerada Pet. Corp.'s C. A. Miller 1, 394.3-ac tr in B. Saltello sur No. 323, Pearsall, sd 5721 ft, dropped until work begins. Thorton Davis et al's Halff & Oppenheimer 1, 1350 ft wl, 330 ft sl of John D. Clare sur 336, 1 mi w Pearsall production, reinstated, td 5433 ft, cleaning out 5433 ft.

GOLIAD COUNTY—The California Co.'s Landgrebe 1, 100-ac tr in John Hancock sur, 8 mi n Goliad, td 5052 ft, set 7 in cas 4795 ft, pulled in derrick. Felmont Corp.'s Mrs. W. O. Maetze 1, 1866-ac tr, Gertrude Baerrara sur, 6 mi ne of Goliad, td 5660 ft, fsg for 2000 ft ds. Zeni Oil Co.'s M. Lutenbacher 3, sw ¼ blk 25, Goliad Town sur, 2 mi s Goliad, dst 4150-60 ft, slight gas flow, top Pettus 5356 ft, core recovered btm 6 inches showed sandy shale, attempted to blow out, set 7 in cas 5352 ft, cemented with 560 sacks, dr plugs, blew out again, killed, cored ahead to 5639 ft, lost hole, sdtr, set liner to 5584 ft, sand 5592-99 ft, fsg job, lost cutting tool, sdtr, td 5599 ft, w/s out liner, set new liner and cemented, junked and abd, tearing down rig, packer shot 5475-95 ft in sdtr hole.

GUADALUPE COUNTY—Pat Armstrong's M. Tiller 1, 10-ac tr, J. G. King sur, 2 mi ne Kingsbury, dr 1209 ft sh. J. E. Clark's E. W. Williams 1, Green DeWitt sur 13, td 2622 ft, fsg for tubg, sd for high water. T. H. Coulter's August Engelke 1, 54.1-ac tr, Harriet Cattle sur, ru and sd, dropped until work begins. Charles Culver et al's Wm. Vorpahl 1, 150 ft sl and el of 210-ac tr, Geo. W. Edwards sur 56, 4 mi se New Berlin, lcn and drk. Eickenroht & Gallagher's O. H. Jorns 1, 840-ac tr, Green DeWitt sur, 5 mi sw South Darst Creek, td 3204 ft, td in Georgetown, set 6⅝ in cas at 2700 ft, top ch 2920 ft, top Eagleford 5081 ft, top Buda 3122 ft, top Del Rio 3184 ft, top Georgetown 3200 (?) ft, swabbing 100 ft off btm, show little oil and gas. F. H. Gallagher's Katie Lay 1, on 20-ac lse, J. K. Davis sur, 800 ft e Stagal & Ramona crevice wells, sp. Long & Ross' Ed Feliz 1, 1½ mi s fr New Berlin 75-ac, V. Duran sur, D&A 399 ft. Riddle Oil Co.'s E. Nolte et al, J. Sowell sur, 6 mi e Seguin, 6⅝ in cas 1780 ft, td 1845 ft, ch, swabbed down to 1400 ft, small oil show, pulled cas in two at 1410 ft, sidetracked, sdtr td 1747 ft, 6⅝ in cas collapsed, pulled out pipe, lost 400 ft, recemented, woc.

HIDALGO COUNTY — Maxwell-Mundy-Morris' Southland Dev. Co. (Hidalgo County Water Control & Impr. Dist.) 2, lot 1, blk 20, Alamo Land & Sugar Co sur, Alamo gr, 4 mi s Alamo, td 731 ft, pb 650 ft, perf 638-642 ft, pumping 679 ft, making slight show of oil 640-45 ft. Pantana Pet. Corp.'s (McMullen Exploration Co.) R. W. Harding 1, 850 ft w of old Quintana Engleman 1, in lot 11, blk 94 in Mestinas gr, Missouri-Texas Land & Irrigation subd, dr 6662 ft. H. J. Porter et al's Sweeney Est. 1, lot 1, Waynes Wood subd 1, 6 mi sw of Donna, sp in, set 350 ft sur pipe, test slated to start dr soon on 6500 ft dr contract. Union Sulphur Co.'s ARGL&L Co. 10, blk 50, tr 2418, N. Capisallo dist, coring ahead in brown shale 8026 ft.

JIM HOGG COUNTY—Eastland Oil Co.'s E. Vela heirs 1, blk 5, Clark & Cowden subd, sur 572, sh 1, El Peyote gr, lcn. Pan-Ultimo Oil Co.'s (Theo Hicks et al's) Kohler 1, blk 9, Noriacitas gr, 3 mi nw Hebbronville, coring 2430 ft in sand topped at 2414 ft. J. H. Meek's Martinez 2, sur 623, 660 ft se No. 1-A, dr 1200 ft Sam Payne's R. Holbein 1, blk 10, Hogg Ridge subd, sh 3, Las Animas gr, ru. Henry Swift's Holbein 1, center blk 58, sec 3, sh 3, Holbein subd, Las Animas gr, coring for Cole sand 1370 ft. Locke Purnell & Gifford Oil Co.'s Gallagher 1-A, blk 128, Pippin subd, Randado gr, dr 2178 ft, Cole sand 2158-78 ft; C. O. Gallagher 1-B, 40-ac tr Randado gr, blk 190, Pippin subd, lcn.

JIM WELLS COUNTY — Camp Drilling Co.'s Jane Schallert 1, 1134-83-ac tr, sh 3-A, Las Presenos de Abajo gr, 2½ mi w Bentonville field, gas sand 3077-84 ft, dr 4152 ft. Gist & Graddy's F. Bennett 1, lot 87, sec 76, Holdeman subd, 2 mi w Premont field, 2350 ft, cored sand 2340-48 ft, dst 2340-48 ft, blow of gas 140 ft dr mud cut with oil, cored to 2350 ft, still in sand, dst 2340-50 ft, showed 5 thribbles (300 ft) 22.6 grav oil, 3 thribbles fresh water, 1 joint fine sand, 15 min, ¼ & ⅜ ch, running cas. Tom Graham's James P. Luby Estate 1, sh 4, Los Presenos de Abajo gr, 1 mi w Bentonville townsite, coring 2918 ft. Edwin M. Jones' Almond 1, n½ of HT&B sur 7, ab 232, ru. La Jita Corp.'s Hayden et al 1, ne/2 of sec 19, Richard King Farm lots, ru. Putnam et al's Canales Est. 1, center blk 32, Mosser subd of Canales Est, dr 1900 ft.

KARNES COUNTY — Luling O&G Co.'s Wheeler Holmes 1, 100-ac tr, Carlos Martinez sur, 2 mi s Green, sd 60 ft, dropped until work resumes.

KERR COUNTY—S. W. Forrester's J. W. Bailey 1, 3333 ft wl, 1280 ft nl, A. L. Starkey sur 403, 3 mi n Ingram, Tex., lcn.

KIMBLE COUNTY — Wilcox O&G Co.'s Hugh Spiller 1, sec 15, Brooks & Burleson sur, lime and shale 1795 ft.

KLEBERG COUNTY — Clark et al's Givlin 2, Fernando Creek, blk 8, sec 39, KT&I subd, td 2142 ft, 7 in cas 2124 ft, sand 2124-34 ft, tested sw, slight oil show, sd, orders.

LA SALLE COUNTY—W. H. Vernor's M. G. Jeffries 1, 150 ft nl, center el and wl sec 726, HE&WT RR sur, sd 150 ft.

LEE COUNTY—James E. Pederson's C. A. Turner 1, 65-ac, David Hudson sur, 1½ mi se Tanglewood, td 6560, trying to pull liner.

LIVE OAK COUNTY—Dirks Bros.' Atkinson 1, 350-ac tr, L. Ayers sur in nwc of county, dr below 600 ft. J. H. Durbin's Marbach 4, 429-ac tr, Stephen Hays sur, 2½ mi sw of Whitsee, sd 850 ft. R. H. Feltner et al's Sanger Ranch 1, w½ of G.C.&S.F. sur 391, sd for gasoline rig. O. W. Killam's Schultz Live Stock Co. 1, dr 2000 ft. Loma Oil Co.'s Palmer 2, 1800 ft nel, 150 ft nwl of tr in T. B. Sparks sur, 4 mi sw Whitsett, mim. Maryland Oil Corp.'s Geo. West Est. 1, w cor lot 299 in Fernandez & Vaughn surveys, 5 mi sw Geo. West townsite on blk acquired fr Whisenant & Trenchard, mim.

MAVERICK COUNTY—Rio Dev. Co.'s Winchester Kelso 1, 297-ac tr in sur 2, 3 mi n fr Eagle Pass, sd 601 ft, dropped until work resumes. Thornton & Underwood's Thompson heirs 1, Uvalde County School Land sur 2, 6 mi n of Eagle Pass, reinstated, sp and sd 40 ft.

McMULLEN COUNTY—Dan Culter et al's Mrs. Fahler 3, 250 ft el, 1250 ft sl of tr in Geo. Pittuck sur, lcn. Darby Pet. Corp.'s E. R. Hagist 1-A, se¼ od sec 13, K&TC sur No. 13, 4 mi nw Loma Alta, dr below 2200 ft. Hagan Stewart Oil Co.'s J. J. Kunz 1, 350-ac tr in N. Hely sur, sp & sd. Hill et al's J. Richardson Est. 1-A, dr 2775 ft. E. M. Jenkins & Floyd's Raymond Plosczyk 1, blk 1, James Garner sur, td 1200 ft, prep dd. Magnolia Pet. Co.'s Mary Teal 1, Wm. Kuykendal sur No. 4, 4 mi sw Crowther, dr 3782 ft, rock. Ike Taylor's H. L. Lark 1, lot 72, Lark subd, E. W. B. Scrugham sur, between Jacob and Callihan fields, td 600 ft, well blew out, sprayed gas, ran wild, pumped

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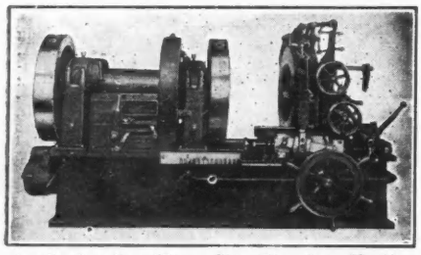

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in heavy mud after blow out, dr relief well; W. S. Red 1, nwc Geo. Pittuck sur, sp & sd, wow.

MEDINA COUNTY—G. N. Whitting et al's Hondo Nat'l Farm Loan Ass'n 1, 24-ac tr, sec 214, 5½ mi se Honde, sd 671 ft, t serp 505 ft, oil show 662-671 ft, td 1408 ft, cored Buda 1365-69 ft, cored Del Rio 1399-1408 ft.

NUECES COUNTY — Barnsdall Oil Co.'s Weil 1, lot 5, McBride Patrtition between Saxet and Corpus Christi fields, coring 4150 ft. Bunte O&G and Woodley Pet. Co.'s Margaret Kelley 1, sec 4, range 7, H. L. Kinney sur, 4 mi se Clarkwood, td 700 ft, set sur csg, woc. J. T. Cox's John Harney 1, sh 11, Harney lands, 2½ mi se Callihan, sd 4279 ft. Gem Oil Co.'s J. T. Smith 1, in center of lot 22, blk 47, abt ¾ mi n of disc well, td 6658 ft, flow into tanks, no gauge. W. L. Hinds' Clara Driscoll Sevier 1-A, 283 ft sl & el of w½, fractional sec No. 60, Paul subd of Driscoll Ranch, 65 ft se No. 1, lcn. O. W. Killam's Clara Driscoll Sevier 1, 330 ft sl & wl, 40-ac tr of sec 112, J. A. Cabosos sur, Bishop subd of Driscoll Ranch, 2 mi s Driscoll townsite, ru. W. A. R. Oil Co.'s Mrs. Bertha Buckholt 1, 330 ft easterly wl & northerly nl of 258.9-ac tr, sh 4, Buckholt partition, Ward sur No. 3.6, 1 mi se Clarkwood, dr 3700 ft.

REFUGIO COUNTY—Benedum & Trees' R. H. Welder 1, commence w cor Friedline pasture, thence n 53 degrees east 4445 ft to location in Juan Pabadan o sur, ab 49, td 7344 ft, d & a.

SAN PATRICIO COUNTY—Callaway-Crosby & Porter's White Point Dev. Co. 1, 438-ac tr, Seguin sur 4 & 5, ab 247, 4900-15 ft, dst 4899-4815, rec 510 ft oil, 37 lbs pres, 5 min, flowed several hrs through ¼ and ⅜ ch, make 20% oil, balance wash water, killed to deepen, saturated sand 4900-43 ft, dry sand 4943-53 ft, ran electric formation test, good kick 4901-36 ft, dr ahead to contract, will pb & comp if deeper sands do not produce, now dr 5696 ft. Eleanor Oil Co.'s Wm. Kline 1, lot 5, blk "c," Coleman-Fulton Pasture Co. subd, 2½ mi se of Gregory, dr 6140 ft. Plymouth Oil Co.'s E. H. Welder 2-D, sec 4, Welder Ranch subd, 2½ mi ne Sinton field, sand 5535-41 ft, set 5⅞-in csg, dr plugs 6500 ft, perf 5912-18 ft for test, pb 5930 ft. Trinity Drillers' W. C. Mayfield 1, lot 11, Roos subd, 2 mi n of White Point gas field, dr 5698 ft.

STARR COUNTY — Sam Adam's Garza 1, Military Reservation, sh 20A, porc 80, J. of Revnosa, 5200 ft sw Rio Grande City field, dr 425 ft. I. F. Anderson's Yzaguirre 1, 139-ac tr, porc 79, temp sd 2910 ft, repairing rig. Howard Bass' Hayden et al 1, s½ blk 4, sur 47, porc 80, mi to start rigging. Bennett & Lowe's A. Guerra 1-A, sur 293, 4 mi se Cuevitas field, sp. Davenport's Kelsev-Bass 1, Davenport subd of n 585-ac of porc 86 & 87, Camargo Juris, 4500 ft ne and slightly e Larkins & Warr's Kelsey-Bass 1, 2 mi w Barbacoas field, sd 2500 ft for rig repairs. F. Davenport & Slick Urschel's T. B. Slick Est. 1, el of sec 485, dr 2900 ft. A. A. Kelley's Higinio Gonzalez 1, 100-ac lse, sh 67, porc 71, Juris of Mier, td 500 ft, made dry gas and no oil show on 1 hr dst of sand 430-499½ ft, coring deeper for test abt 500 ft. J. W. Richards et al's Ysidro Garcia 1, sh 7B, porc 71, Ancient Juris. of Mier, 13 mi n Roma, lcn.

TRAVIS COUNTY—W. B. Bottinfield et al's P. C. Wells Est. 1, T. Harper & T. B. Keurk sur, dr 740 ft hard sh. Doray & Lefors Pfluger 1, T. Davis sur, set 6⅝ csg 684 ft, dr in hard chalk 719 ft. A. C. Schram's Stemholm Est. 1, tr in J. B. Kemp sur, 142-ac tr, d & a in chalk.

VICTORIA COUNTY—Plymouth Oil Co.'s J. J. Welder 1, lot 11, 371.9-ac tr S. Belding sur, ab 141, 7 mi e of Nursery, sand 5719-27 ft, running dst, good odor.

WEBB COUNTY—R. S. Bolling's Ft. Worth Nat'l Bank, tr 1, blk 4, sur 466, 2½ mi n Mirando City, dst 1350 ft tested dry, dd. Ivan Howard et al's Frost Nat'l Bank, n½ sur 733, td 20 ft, set 10-in csg, woc. LU-Tex Oil Co.'s Lone Starr Const. Co. 9, porc 12, 12 mi nw of Laredo, fsg 2310 ft. Mid-Continent Pet. Corp. and Oklahoma Co. of Tex., Inc.'s E. T. Lubacher 1, nw¼ of sec 1394, dr 14935 ft. Sackett & Keoughan's Wilmot Est. 1, sw¼ nw¼ of w 640-ac sur 201, sp with spudder, laying water lines. Superior Oil Co.'s J. H. Kirkpatrick 1, sur 18, 1 mi s Leaseholders, 3 mi nw Lopez, sp.

WILLACY COUNTY—Shell Pet. Co.'s Yturria Land & Cattle No. 1, sh 65, San Juan de Carritas gr, La Sal Veja prospect, td 7662 ft, oil sand 7642-52 ft, 9⅝ cas 7625 ft, dst with tool seated at 7642 ft, rec 540 ft oil, some sw, 10 min, ¾ & ¼ in, on 24 hr gauge, comp for 443.52 bbls, 5⅛-in ch, tp 1100 lbs, cp 1525 lbs, 57.8 grav corrected to 56.3, well temp 130 degrees, 2% sw, ½ of 1% paraffin, 8,666,000 cu ft gas, gas/oil ratio 19,500 to 1.

WILLIAMSON COUNTY—H. H. Coffield et al's Paul Horn 1, 76-ac tr, J. Bevil sur, sd 800 ft, dropped until work resumes. Fred Hughes' M. A. Bachmeyer 2, C. C. Browning sur, sd 1600 ft; Mrs. Sallie Schlickiesen 1, 70-ac tr, lcn, drop.

ZAPATA COUNTY—Gilcrease Oil Co.'s Antonio Trevine et al 1, blk 5, sec 3, Mode subd, porc 2 & 3, 17 mi w Comitas field, dr 737 ft. Hill & Hill's O. S. Alexander 1, porc 25, sd 2608 ft, woc. The Texas Co.'s J. D. Jennings (Whitehead) 93, Cerrito Blanco gr 15, 941.6-ac tr, 1 mi fr Escobas production, coring 1487 ft.

TEXAS GULF COAST

BRAZORIA COUNTY—Gulf's Wilkes Smith 2, Lochridge prospect, J. W. Hall sur, dr shale 2328 ft.

BURLESON COUNTY—Red Bank Oil Co.'s Grann 1, Chriesman area, E. Santa sur, dr chalk 4890 ft. M. R. Exploration Co.'s Fontaine 2, 1300 ft n of No. 1, Wm. Raleigh sur, dr shale 201 ft.

CHAMBERS COUNTY—Laverne Decker's Johnson 1, ne of Anahuac, T. & N. O. sur, sec 30, lcn. Glen H. McCarthy's Kilgore 3, Cotton Lake area, J. Townsend sur, coring salt water sand 6380 ft. Humble's Ben Dutton 1, Cotton Lake area, K. Dugat sur, dr shale 5896 ft. Sun's White Estate 2, Seabreeze prospect, T. & N. O. sur, sec 128, woc 1386 ft.

COLORADO COUNTY—Sterling's South 1, Garwood area, I. & G. N. sur, sec 41, dr shale 6106 ft.

GALVESTON COUNTY—Shell's Maco Stewart 1, Hitchcock prospect, J. Spillman sur, dr shale 9115 ft.

HARDIN COUNTY—Republic's Brooks 2, relief well, Silsbee prospect, J. W. Brooks sur, woc 7042 ft.

HARRIS COUNTY — Amerada-Stanolind's Carpenter 1, Fairbanks area, F. Fry sur, comp 299 bbls 14 hrs, ¼-in choke, 6860 ft. Bunte's Graves 1, Bammel prospect, C. Walters sur, dr sdtr hole 600 ft. Stanolind's Angello Candelari 1, Reels and Troubough prospect, Reels and Troubough sur, dr 5045 ft.

LIBERTY COUNTY—J. C. Mayo et al's K. Moore 1, Rumayor prospect, J. F. De Rumayor sur, dr shale 1011 ft.

MATAGORDA COUNTY—Cockburn's Hawkins 8, Sheppards Mott area, D. McCarthy sur, abn heaving shale 5385 ft. Sun's Craig 2, Hawkinsville dome, T. Williams sur, dr gyp 326 ft. Tettes & Harris' Pierce Estate 1, Blessing prospect, J. W. E. Wallace sur, coring sand 4024 ft.

MONTGOMERY COUNTY—W. W. Chapman et al's Thomas Foster 1, Willis prospect, D. Pevehouse sur, ru.

ORANGE COUNTY—Tide Water's Brown Fee 1, Cow Bayou Prospect, W. Dykes sur, abn 7868 ft.

POLK COUNTY — Dick Schwab's Kirby Lumber Company 2-A, Ace Area, P. A. Sublett sur, abn 4863 ft. Peyton Brothers et al's McDonald 1, w of Ace field, T. J. Manard sur, ru.

WHARTON COUNTY—Fe'mont Oil Corp.'s General Mitchell 1, Spanish Camp prospect, D. Wade sur, dr shale 5531 ft. Pure Oil Co.'s Duffy 1, Blue Basin prospect, E. T. R. R. sur, sec 107, dr sand 5747 ft; same operator's National Bank of Toneka 1, Blue Basin prospect, W. F. York sur, dr sandy shale 4739 ft. Texas Crusaders' Hawes & Nelson 1, Lane City prospect, S. Castleman sur, woc 975 ft.

WYOMING

ALBANY COUNTY—James Lake Oil Co., George & Hunt 1, nw ne se 5-17n-75w, dr 4123 ft. Hal Blakeman's Chappel 1, cne nw 35-21n-76e, dr 1510 ft. Ohio Oil Co.'s Elisabeth Stiles 1, sw cor 12-15n-75w, dr plug, 4¾ in csg at 1480 ft, top of Santanka shale with plugged depth 2900 ft where will test so. Pb from 2978-3003 ft in Tensleep sand carried water.

CARBON COUNTY — Medicine Bow Oil Co.'s Hintze-Government 1, cne se 13-22n-78w, dr 1516 ft. General Petroleum Corp.'s Union Pacific 1, sw sw sw 5-19s-83w, fsg at 4412 ft.

CONVERSE COUNTY—E. B. Jones' State 1, sw sw sw 16-32n-69w, sd at 3012 ft. Wyoming Southern Oil Co.'s Salisbury 1, nw cor nw se 27-32n-69w, mim.

HOT SPRINGS COUNTY—Empire State Oil Co.'s Larson 1, ne se nw 32-44n-93w, dr 1521 ft.

LARAMIE COUNTY—Amerada Petroleum Corp.'s Morton 1, csw sw 13-13n-68w, dr 3018 ft.

NIOBRARA COUNTY — Adams-Louisiana Co.'s Spaugh 1, cnw ne 18-35n-65w, sd at 223 ft awaiting rotary. Lewis Gokel's Fee 1, sw ne 31-34n-62w, dr 925 ft.

PLATTE COUNTY—Dividend Oil & Refining Co.'s Fee 1, s nw sw 17-24n-66w, dr 423 ft and carrying 12½ in csg.

SHERIDAN COUNTY—Beaver Creek Oil Co.'s Allison 1, s se se se 15-55n-85w, dr 3200 ft.

For SALE or RENT

Complete drilling outfit, including drill pipe, thoroughly reconditioned, at a saving to you.

Call or wire for prices

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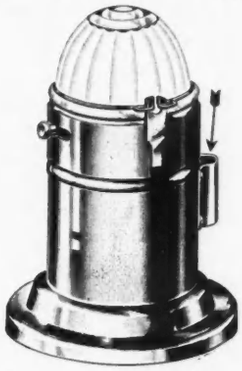
HOUSTON, TEXAS

NEW PRODUCTS FOR THE FIELD
Machinery • Tools • Catalogs • Books

ELECTRIC FLARE
Economy Electric Lantern Company

Economy Electric Lantern Company, Chicago, Illinois, announces an electric flare with a specially designed ruby red lens that throws a light visiable a half mile in all directions. These new low cost Ecolite Flares were approved by the Underwriters after exhaustive tests on vibration, dust, water, visibility and reliability of mechanism.

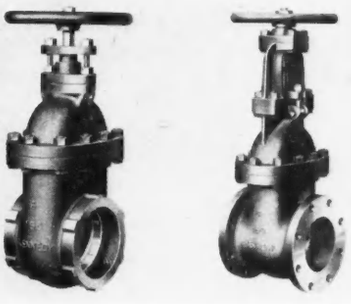


Economy Electric Flare

Made with either flashing or steady burning mechanism, the flare operates 35 to 40 hours on a 6 volt battery with Flashing mechanism, and will operate from 60 to 80 hours as a steady burning flare. It has a sliding wireless switch and is finished in bright red enamel with cadmium plated base. Three Ecolite Flares fit snugly in a heavy 24-gauge metal container that

GATE VALVES
The Kennedy Valve Manufacturing Company

The Kennedy Valve Manufacturing Company, Elmira, New York, has introduced a new line of standard iron-body wedge gate valves, which has several features of interest to engineers and other users of valves. The metal in these valves is of a particularly dense structure, and on test by an outside laboratory has proved to be more than 50 percent stronger than ordinary cast iron. The bodies are of oval section with well-rounded corners; the flanges and bolts are heavy, and ribbing is provided at the flanges on the larger flanged-end valves and at the yokes and caps of outside-screw-and-yoke valves.



Kennedy Gate Valves

There are no studs at any part of the valves, and all bolts have the nuts above the flanges and with ample room for standard open-end wrenches. Both nonrising stem and outside-screw-and-yoke types have special provisions to facilitate repacking. The latter type has eye bolts at the stuffing box which swing out of the way, with washer nuts which eliminate the annoyance of loose washers, packing gland with slotted flange bolts, and shelves on the inside of the yoke to hold the gland out of the way. The stuffing-box bolts and nuts are rust-proofed to prevent corrosion.

Heavy bronze bushings are used wherever the stem passes through a cast-iron part, as at the yoke cap, packing gland and stuffing box.

The screwed-end valves have round ends for best distribution of metal and lugs for convenient application of pipe or chain wrench. Handwheel rims are of oval section and have only five spokes, permitting ample room for the operator's hands even if gloved.

These valves are made in all standard sizes from 1½-inch to 60-inch for steam working pressures of 150 pounds and water working pressures of 200 pounds.

ROTARY HOSE END
U. S. Rubber Products, Inc.

U. S. Rubber Products, Inc., New York City, has announced a new type of wire reinforcement and a new style of reinforced end on its Matchless and Peerless brands of rotary hose. The wire reinforcement which has increased the burst-resistance of the hose many hundred pounds consists of multiple plies of extra heavy duck and in the case of Matchless three plies, and Peerless two plies of a radically new type wire spiralled in opposite directions by a special method, it is claimed. Each ply of wire is embedded in rubber and carefully insulated from the other by a ply of rubberized duck. The cover is of selected, best abrasive-resisting rubber, 50 percent thicker than any other cover used before.

Because the areas at the ends are where hardest service occurs, a new method of end reinforcement which extends back 36 inches has been developed. This reinforcement consists of an extra ply of wire and numerous plies of heavy duck to take the strains of couplings, vibration, bends and high pressure.

PIPE THREADER
Beaver Pipe Tools

Beaver Pipe Tools, Warren, Ohio, recently introduced No. 2 ratchet pipe threader, which also may be used with adjustable bolt dies. Improvements include oil holes in the die head, dies square in shape with no breakable offsets; dies that can be inverted for threading close to walls; dies easily removed for resharpening, and a general construction of unbreakable air furnace malleable iron. Vanadium alloy steel dies are used.

CIRCUIT BREAKER
General Electric Company

General Electric Company, Schenectady, New York, has announced a new air circuit breaker, Type AE-1, adapted to industrial and station auxiliary service, or for any heavy duty where many opening and closing operations are required. The breakers have a 20,000-ampere interrupting rating and are for operation on circuits of 250 volts d. c. and 600 volts a. c. at 15 to 600 amperes.

The standard arrangement is an enclosed breaker with pull box for mounting on a wall or behind a switchboard panel; without pull box, for mounting on the front of the switchboard. Main contacts are silver-to-silver; arcing contacts are of special alloy. Double- and triple-pole units are available.

A selective overload feature differentiates between overload and short circuits, time delay being provided up to six to 10 times calibration setting and instantaneous above that. The mechanism is electrically operated, trip-free, and latched-in with a solenoid suitable for either a. c. or d. c. depending on rating.

The unit is completely enclosed with the base included within the case. The approximate dimensions with pull box are 19 inches wide, 21 inches high, and 21 inches deep; without pull box, the depth is nine inches.

METALLIC COATING
American Coppercote, Inc.

American Coppercote, Inc., New York City, has introduced a pure metallic copper of extreme fineness and of the irregular flaky structure known as "dendritic" can be applied to iron, steel, wood, concrete, or other surfaces which require a protective coating of unusual effectiveness. This new coating is being produced under the name "Coppercote" and has been thoroughly tested in the solution of many difficult corrosion problems.

While the coating is applied, a physico-chemical reaction occurs between the particles of copper and its vehicle. Since the copper is "dendritic" in structure rather than granular, a closely knit coating results which, when set, forms a tough hard metallic surface.

When applied to a surface already rusted, it will arrest any further corrosive action. It will not crack, scale nor chip as a result of the extremes of temperature nor it is affected by the ultra violet rays of the sun, the manufacturer claims.

Coppercote has been applied to steel columns under conditions of extreme dampness in the Eighth Avenue Subway, New York City. Perfect protection is still being given after a year of service, it is claimed. Deeply corroded specimens of angle iron were treated with Coppercote and buried in coal cinders for one year. At the end of this period they were unearthed and found to be in good condition. Steel specimens coated with Coppercote were buried in alkaline soil for two years. When dug up, they were found to be unaffected. Coppercote coated steel panels were found to be unaffected by gasoline after immersion for extended periods of time.

Rotary Drilling Handbook

"Rotary Drilling Handbook," an interesting 300-page handbook recently published by Russell Palmer, 56 West 45th Street, New York City, is being offered to the petroleum industry as a practical help to the field man who wishes to obtain operating data that may be applied to everyday problems. The author started computation of tables several years ago, and during a long period of field work developed an efficient operating technique from them.

Both the text and tables have been written and prepared in an informal manner in order that the technical phraseology and discussions could be avoided. In many cases practical values, rather than absolute, are given.

Full sections are devoted to power plants, circulating pumps, derricks, engines and draw works, rotary tables, field controls, derrick equipment, lubrication, wire lines, drilling shafts, measuring pipe, bits, drilling fluid, rotating speeds, weight on bit, instruments, directional drilling, fishing, casing and cementing, formation testing, hole sizes, safety measures, geology and formations, and summary.

The author, J. E. Brantly, is a graduate geologist and mining engineer, and for several years has directed all field operations for Drilling and Exploration Company, of which he is president.

Michigan Gas Reserves

The U. S. Bureau of Mines recently issued Report No. R. I. 3313, a "Report of Investigations of the Extent and Availability of Natural Gas Reserves in Michigan Stray Sandstone Horizon of Central Michigan." The report, submitted by the Bureau of Mines to the Geological Survey Division, Department of Conservation, State of Michigan, was based on studies made by the Bureau at the request of the Department of Conservation and the Michigan Public Utilities Commission.

Revised API Rig-Derrick Specifications

Announcement has been made of the publication of a revised eighth edition of "American Petroleum Institute Specifications for Standard Rigs and Derricks," which incorporates revisions and additions proposed at the Institute's meeting at Tulsa last May and subsequently ratified by letter ballot.

Principal changes include a new derrick size, reduction by approximately 17 percent of all formulas for walking beams, and change to "final" from "tentative" of the formulas for silicon walking beams and for base plates.

Copies of the revised specifications, which supersede the seventh edition of August, 1935, are available at the Institute's Division of Production headquarters, 1508 Gulf States Building, Dallas, Texas. The price is 65 cents, with discount for quantities.

Flexible Couplings

Diamond Chain & Manufacturing Company, Indianapolis, recently published Bulletin 12, which describes and illustrates the improved Diamond flexible coupling line and explains the advantages in the use of double-strand Diamond chain. Many illustrations of installations are included as well as capacity ratings, dimensions, and other data necessary for proper selection.

This Week with the Industry's EQUIPMENT SUPPLIERS

Daniels Elected Vice President of FWD

H. M. Daniels, eastern sales division supervisor for Four Wheel Drive Auto Company, has been elected a second vice president of the company, Walter A. Olen, president, has announced.

Daniels, who was appointed eastern sales supervisor last fall, has been manager of the New York FWD Branch for 13 years. Prior to that, he was foreign sales representative in China, Java and the Far East.

Walter Parrish Made Chief Engineer of Buda Company

Walter A. Parrish has been appointed chief engineer of The Buda Company, Harvey, Illinois. He succeeds the late Carl C. Hinkley.

Parrish has had wide experience in the design and application of industrial, automotive and marine engines. He graduated from Detroit Technical Institute in 1910, and shortly after entered the internal combustion engine field with Hudson Motor Car Company. Parrish joined The Buda Company in 1928.

L. C. Moxie has been appointed assistant chief engineer of the company. Moxie has been with the company since 1922, except for a short time in 1927 and 1928.

G. D. Spackman Appointed Superintendent of Lukens Steel

G. D. Spackman has been appointed general superintendent of Lukens Steel Company, Coatesville, Pennsylvania, to succeed J. H. McElhinney, resigned. Spackman, who was born June 29, 1895, at Coatesville, was formerly president of Lukenweld, Inc., a division of the Lukens Company.

G. D. SPACKMAN

In the summer of 1919, Spackman joined Lukens Steel Company, serving in the mechanical department and handling steam, hydraulic and combustion problems. In December of 1920, he was appointed fuel engineer for the company, serving in that capacity until August, 1925, when he was appointed superintendent of the flanging department.

In August, 1929, he was appointed assistant general superintendent of Lukens Steel Company. When the Lukenweld division was formed in May, 1930, for the design and fabrication of welded steel structures for machinery and equipment service, Spackman was elected president of Lukenweld.

Along Equipment Row at Corpus Christi, Texas.

Fairchild Aerial Surveys, Inc.

Air view of American Meter Company's Metric Metal Works plant at Erie, Pennsylvania. This unit occupies more than 170,500 square feet and employs over 300 people. In the right foreground is the new brass and alloy foundry.

Hicks Is Chicago Sales Manager for New York Belting

Harry C. Hicks has been appointed sales manager of the Chicago district by New York Belting & Packing Company. Hicks has been associated with the New York Belting & Packing Company since 1913.

The Chicago district includes the states of Illinois, Indiana, Western Ohio, Kentucky, Kansas, Nebraska, Iowa, Minnesota, Wisconsin and Michigan. Hicks' headquarters will be at the Chicago office, 3550 South Morgan street.

New York Office of Timken Steel Moved

New York office of The Timken Steel & Tube Company, Arthur R. Adelberg, district manager, will, after September 15, be located at 165 Broadway, Room 1000. Adelberg formerly had his office in The Timken Roller Bearing Company offices at 16 West 60th Street.

New Offices and Display Room for American Iron

A new, modern, fireproof addition to American Iron and Machine Works Company headquarters at Oklahoma City, designed to greatly facilitate service, and provide a more effective display of the companys products is now under construction and scheduled to be ready for occupancy by the first of the year.

Air conditioned offices and light, roomy display room, all modernly equipped, are some of thh features of Americans new addition.

Since its beginning ten years ago, the companys office force has grown from two to 20 employees. The small office building at left in picture compared to new building at right reflects the growth of the main office in 10 years. In addition to the Oklahoma City offices and factory, American has Gulf Coast Headquarters at Houston, and branches at Kilgore, Texas; Seminole and Fittstown, Oklahoma.

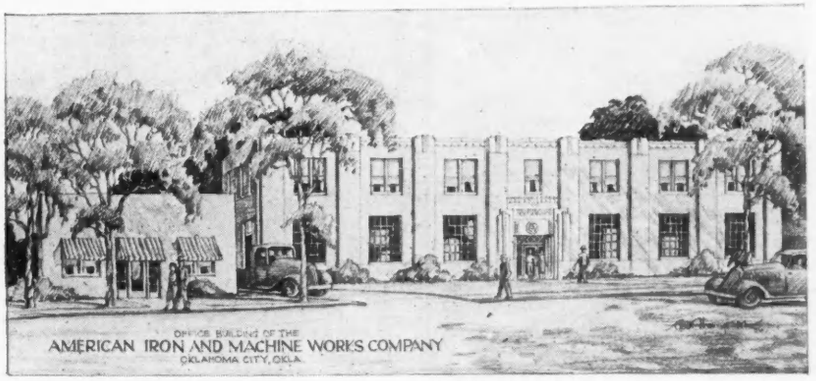
Mid-Continent Supply Opens Dallas Office

Mid-Continent Supply Company, with headquarters in Fort Worth, has opened a sales office at 1111 Magnolia Building, Dallas. H. H. Brown is in charge.

J. J. Oller, President of Landis Machine, Dies

J. J. Oller, president of Landis Machine Company, Waynesboro, Penn., died September 3. He became a director of the company in 1907, and was elected president in 1910 and served in this capacity until his death.

A. P. FRANCIS now is associated with Smith Separator Corporation in Tulsa as sales engineer. For seven years he was with Stockham Pipe Fittings Company of Birmingham, Alabama.



SURE SHOT

Thoroughly proven and satisfactorily used for years, an O'Bannon Overshot Socket is your natural choice when you need to fish for a hardened coupling or a broken rod.

It's a sure shot!

Previously made for A. P. I. sizes only, this clever socket is now available for fishing

1⅝" diameter coupling in 2" tubing

2" diameter coupling in 2½" tubing

SOLD BY SUPPLY STORES

Walter O'Bannon Company
Tulsa, Oklahoma

O'BANNON SUCKER ROD SOCKETS

Squeaks from the Bull Wheel

Yes, What?

A good poker player can successfully run any business.

What does a good poker player need with a business?

Mean

I think that Mrs. Sedder is the meanest woman I know.

What's wrong with her?

I rode downtown with her this morning and I listened to her tell all about her operation. And when I started to tell about mine she got off the street car.

Naturally

"And when Lord Chesterfield saw that death was near," related the history professor, "he called his friends around him and just before he breathed his last uttered those immortal words. Who can tell me what those words were?"

The class responded in unison:

"They Satisfy."

After Effects

A lady who had given a dinner party met her doctor on the street the following day and stopped to speak to him.

"I am sorry, doctor," she said, "that you were not able to come to my dinner party last night. It would have done you good to be there."

"It has already done me good," replied he. "I have just prescribed for three of the guests."

Modern

He was applying for County Relief and the young lady official was filling out the customary form.

"Do you owe any back house rent?" she asked.

"We ain't had no back house for years," he replied with great dignity. We've got modern plumbing."

Title Opinion

We have examined two abstracts, four affidavits, one telegram and six scraps of paper showing title to the following property in Wilbarger County, Texas:

Beginning at a ripple in the Red River; thence running rapidly up and down said river 10 chains; thence to a tin can in the prairie; thence meandering across the prairie to a cactus bush, and thence running gradually to the beginning, containing 20 acres according to a survey for the purchaser or 30 acres according to the sellers survey, including and excluding all fish and clam shell in said river. It is also an established "prima facie" fact that the Red River may have been the Rio Grande at one time and the whole state belongs to Oklahoma.

According to said abstracts, we hope and trust and pray that the title to said property is vested in Jessie James, (unless he has died) subject to the following requirements:

1. An affidavit should be obtained from King Ferdinand and Queen Isabella of Spain or all of their heirs stating whether Columbus discovered American Coram Nobis, and if not why not.

2. Provided that Jesus Maris Espanola who died in 1806 left no heirs other than his 13 children who signed the deed scire facies.

3. At page 3½ AA there appears a pencil notation on the margin as follows: "Get toilet set and compact for Edith". Get affidavit from heirs of David Crockett that this was done.

4. A suit to quiet title should be brought in the Supreme Court of the United States to remove this cloud.

5. The Notorial Acknowledgment does not state the color of eyes and hair; also we will require proof that the wife has not cohabited with her husband for at least six months prior to signing lease.

6. There is a mortgage on this land held by the Kansas City Skinem Loan Company. We require a birth certificate of President Smith of the Loan Company, otherwise how could we know he is who he says he is, anybody could be Smith.

7. We advise that you buy some other lease because we had a seance with a fortune teller and she says that the nearest oil is sixty one miles Northeast and a little South.

Yours cheerfully,
JONES, JONES, JONES & JONES.

Only at Night

A light company's inspector called on the busy housewife to repair a defect in the lighting apparatus.

"You're not always troubled with poor lights are you?" he asked.

"Oh, no," replied the housewife, "not always."

"Ah," murmured the inspector, "I thought so. It's only at certain times —eh?"

"Yes, only after dark," came the retort.

Easy to Find Out

The professor had bought a new car, and was demonstrating it by taking a spin with his wife. After a while he hurrumphed deprecatingly.

"My dear," he said, with a note of apology in his voice, "I'm sorry, but—er—I'm really afraid I've forgotten what one does to bring this machine to a halt.

"Oh, Enos," shrieked the lady, "what shall we do?"

"Now, never mind dear," consoled her husband. "We'll just stop at the next garage and ask a mechanic."

A Question

She came into the police station with a picture in her hand.

"My husband has disappeared," she sobbed. "Here is his picture. I want you to find him."

The inspector looked up from the photograph.

"Why?" he asked.

No. 17 BEAVER Ratchet 1/4 to 2"

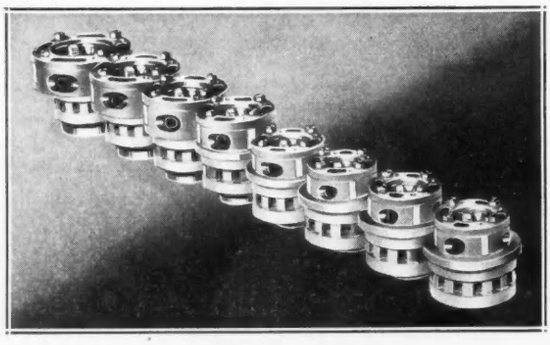
Note the "Bridged" Oil Holes

Here's a pipe threader built to take the torture of hard use. Exceptionally rugged. Note the oil holes are bridged across the top to prevent spreading of the die slots. A highly important advantage. Segments are square in shape—no weak "offset" to develop water cracks in heat-treating. Special long-throat die grinding—for easy starting and easy pulling. An ideal tool for unskilled workmen. Buy any range of sizes desired.

NET PRICES

No. 17 Complete—1¼ to 2"—**$13.20**; ½ to 1¼"—**$14.80**; ½ to 2"—**$22.20**; ¼ to 2"—**$27.80.**

UNITS: — DIE HEADS WITH DIES, ¼, ⅜ or ½"—**$2.80**; ¾"—**$3.00**; 1"—**$3.20**; 1¼"—**$3.40**; 1½"—**$3.60**; 2"—**$3.80.** Ratchet and Handle—**$2.40.** Extra dies, any size, right or left, per set—**$2.25.**



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BEAVER PIPE TOOLS

900 WEEK AVE. ***The Quality Line—Since 1900*** **WARREN, OHIO**

"MIKE"

TELLS THE TALE

Don't let him kid you. This fellow before the radio "mike" is not a honey-voiced radio announcer. In reality he's an engineer who has just discovered that he can use Armco Spiral Welded Pipe for gas-gathering lines, and save time, labor and money in the process.

He has learned that Armco Spiral Welded, though a relatively light-walled pipe, is sturdy enough for any job—that it handles easy and goes in fast—that it readily can be cut and fabricated in the field—that it welds "like a blue streak"—that it is flexible and smooth inside, with an open, scale-free outer wall that grips primer and field coats.

These are not all its advantages by a long shot, but enough to give you ideas. Just turn these ideas into action profitable for you, by mailing your pipe specifications to: The American Rolling Mill Company, Pipe Sales Division, 703 Curtis Street, Middletown, Ohio; Tulsa, Oklahoma, 538 Mayo Building.

ARMCO

ARMCO

SPIRAL WELDED PIPE

(1) WILLIAM'S Adjustable (Carbon Steel) Wrenches are actually the strongest wrenches of their class and type made today. Drop-forged from a special, strong, tough steel . . accurately heat-treated for uniform, dependable strength . . they embody superior design features which assure record breaking performance.

Square shoulders on jaw shank overcome wedging and spreading action common to cylindrical bearings . . provide positive bearing against working stress . . permit thicker, stronger "web" without increasing head thickness. .

Five sizes, 4, 6, 8, 10 and 12 inches, in natural polished steel finish.

(2) And Williams' "SUPERJUSTABLE" Wrenches. Same superior design features, but forged from Chrome-Alloy Steel . . thin, light and strong. Finished in chrome-plate with highly polished heads and "satin" finish handles. Five sizes, 4, 6, 8, 10 and 12 inches.

J. H. WILLIAMS & CO.

75 Spring St., New York

Headquarters for: Drop-Forged Wrenches (Carbon and Alloy), Detachable Socket Wrenches, "C" Clamps, Lathe Dogs, Tool Holders, Eye Bolts, Hoist Hooks, Thumb Nuts and Screws, Chain Pipe Tongs and Vises, etc., etc.

WILLIAMS

SUPERIOR DROP-FORGED TOOLS

ADJUSTABLE WRENCHES

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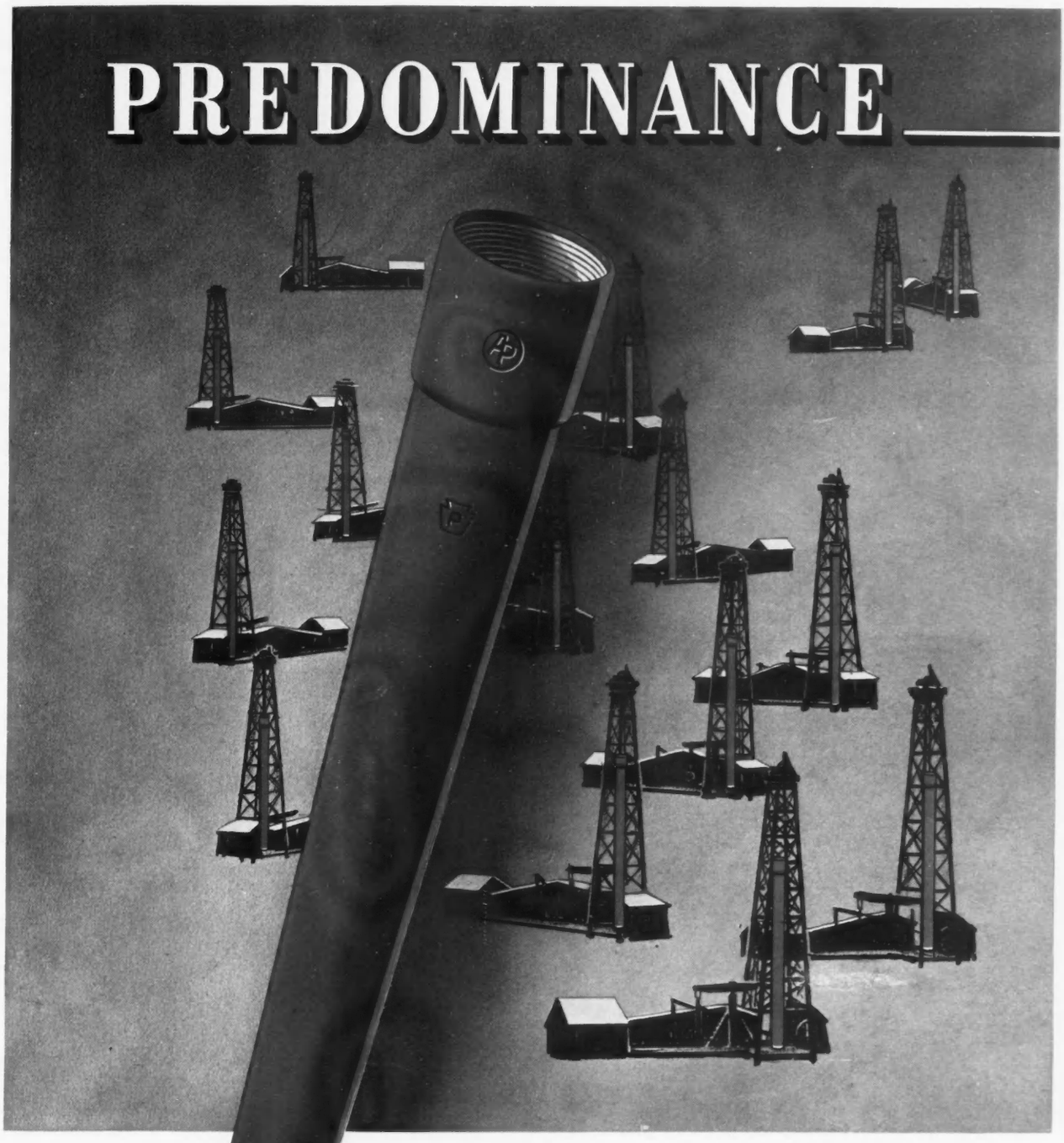

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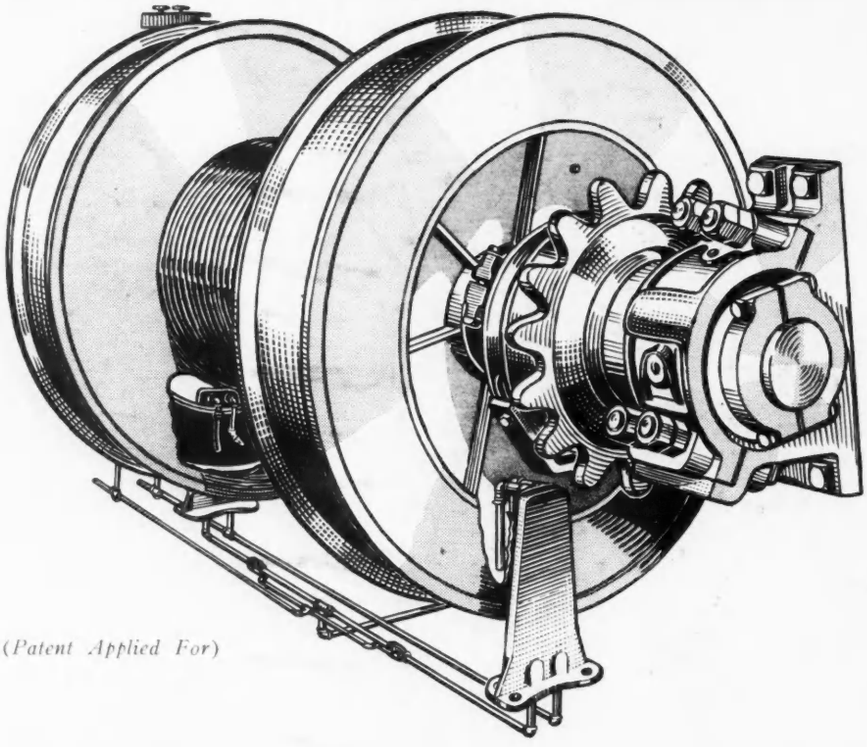

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